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_	EXAMINER HEARING	<del>_</del>
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Hearing Date	JANUARY 9, 1992	Time: 8:15
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1	NEW MEXICO OIL CONSERVATION DIVISION
2	STATE LAND OFFICE BUILDING
3	STATE OF NEW MEXICO
4	CASE NO. 10432
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6	IN THE MATTER OF:
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8	The Application of the OCD on its Own Motion to Consider the Amendment of
9	Division Order No. R-6388-A, Special Rules and Procedures for Tight
١٥	Formations Under Section 107 of the Natural Gas Policy Act of 1978
11	waterar das Policy Act of 1976
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16	BEFORE:
1 7	DAVID R. CATANACH
18	Hearing Examiner
19	State Land Office Building
2 0	January 9, 1992
2 1	
2 2	REPORTED BY:
2 3	CARLA DIANE RODRIGUEZ Certified Shorthand Reporter
2 4	for the State of New Mexico
2.5	

## **ORIGINAL**

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1 EXAMINER CATANACH: Call the hearing back to order, and at this time we'll call Case 3 10432 .. Application of the OCD on its own motion to consider the amendment of Division 5 Order R-6388-A, special rules and procedures for 6 tight formation designations under Section 107 of 7 Я the Natural Gas Policy Act of 1978. 9 Are there appearances in this case? 10 MR. STOVALL: I'm Robert G. Stovall, 11 General Counsel for the Division, Santa Fe. EXAMINER CATANACH: Are there other 12 13 appearances? 14 MR. CARR: May it please the Examiner, 15 my name is William F. Carr with the law firm 16 Campbell, Carr, Berge & Sheridan of Santa Fe. Ι 17 would like to enter an appearance on behalf of 18 Enron Oil & Gas Company. 19 EXAMINER CATANACH: Other appearances? MR. KELLAHIN: 20 If the Examiner please, 21 I'm Tom Kellahin of the Santa Fe law firm of 22 Kellahin, Kellahin & Aubrey appearing on behalf 23 of Conoco, Inc. 24 MR. PEARCE: May it please the

Examiner, I'm W. Perry Pearce of the Santa Fe

1	office of the law firm Montgomery & Andrews,
2	appearing in this matter on behalf of El Paso
3	Natural Gas Company.
4	EXAMINER CATANACH: Other appearances?
5	Gentlemen, do you have any witnesses
6	that you're going to put on today?
7	MR. PEARCE: No witnesses.
8	MR. CARR: No witnesses.
9	MR. KELLAHIN: No witnesses.
10	EXAMINER CATANACH: Can I get the
11	witness to stand and be sworn in?
12	You may proceed, Mr. Stovall.
13	MICHAEL E. STOGNER
14	Having been first duly sworn upon his oath, was
15	examined and testified as follows:
16	EXAMINATION
17	BY MR. STOVALL:
18	Q. Would you please state your name and
19	place of residence for the record.
20	A. I'm Michael E. Stogner. I reside in
21	Estancia, New Mexico.
22	Q. How are you currently employed, Mr.
23	Stogner?
24	A. With the State of New Mexico Oil
2 5	Conservation Division here in Santa Fe.

In what capacity? 1 Q. 2 Α. As a petroleum engineer. 3 Q .. In that capacity, are you familiar with the caves and caverns of Southeast New Mexico? 4 Α. Yes, I am. 5 6 Q. Good. I'm not going to ask you about 7 those. Α. Okay. R Q. Are you also familiar with the agency's 9 rule as the jurisdictional agency for enforcement 10 11 of regulations under the Natural Gas Policy Act of 1978? 12 13 Α. I'm somewhat familiar with it, yes. Have you handled classification 14 15 applications under that Act since you've been with the Division, is that correct? 16 17 Since I started here in 1981, yes, sir. 18 Specifically, are you familiar with the 19 procedure for the processing of applications for 20 tight sand designations under Section 107 of the 21 NGPA? Α. I'm somewhat familiar with it, yes. 22 23 Would you briefly describe what the 107

classification under NGPA means, the significance

24

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of it?

A. Section 107 tight formation was set up by the FERC, the Federal Energy Regulatory

Commission, to designate certain formations as tight, and there's some parameters in the rules and regulations that set up these.

They were originally set up as a wellhead price category designation but has since been utilized as a federal tax credit.

- Q. In other words, the NGPA was a ceiling price statute and the regulations thereunder set ceiling prices for certain categories of gas, is that correct?
  - A. That's correct.

- Q. And subsequently that function of the NGPA and the regulations has more or less disappeared from the scene? Would that be safe to say?
  - A. That's safe to say, yes.
- Q. Let's move on to the specific procedures now for approving specifically 107 tight sands designations.

Has the New Mexico Oil Conservation

Division adopted a procedure for processing and evaluating such applications?

A. Originally in 1978, Order No. R-6388,

subsequently Order R-6388-A, was adopted on February 10, 1981 in its now present format, with rules and procedures in which the OCD has adopted to designated tight formations in the State of New Mexico, and that's Exhibit No. 1.

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And if I may refer to Exhibit No. 2 which is out of the Federal Energy Regulatory Commission's rules and regulations, Section 271.703 for tight formations, this is the federal rules and regulations which essentially is what our order R-6388 repeats and then sets up the format in which the Division is to hear and make a ruling and the procedures and requirements for designations of tight formations.

- Q. The procedures established under R-6388-A, would you describe what currently is required under that order in order to issue a tight formation ruling?
- A. Right now all applications go to hearing, directly to hearing here at the Oil Conservation Division. That's the most significant at this time, other than the rules and procedures, Mr. Stovall.
- Q. Yes. And R-6388-A actually contains a fairly detailed multi-paged Exhibit A which

specifically describes the procedure, is that correct?

A. That's correct.

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- Q. In the enactment of the procedure here, or in carrying out the functions of reviewing these applications, is it correct to say that the State is acting as an agency basically on behalf of the federal government, and specifically the Federal Energy Regulatory Commission, to carry out federal law?
  - A. That is correct.
- Q. And there is no state law regulating or telling the OCD to do certain things with respect to tight sands formations, is that correct?
  - A. That is correct.
- Q. Does the NGPA or the regulations issued thereunder, part 271, require that the matters come to a hearing before the Division?
- A. No, there's no parameter set up that requires us to have a hearing, or any state jurisdictional agency, for that matter.
- Q. What are you proposing with this application, then? What is the Division proposing to do?
- 25 A. I'm essentially proposing at this time

to drop the public hearing procedure and adapt an administrative procedure that will give us here at the Oil Conservation Division more leeway to work with the US BLM and their role in tight formation designations.

- Q. Would you go through the history of what has evolved with respect to tight sands designations that motivates the Division to request this change in procedure?
- A. Since 1979 we've had 27 here at the Oil Conservation Division. There have been 27 approved tight formation designated areas. One application was withdrawn at the Commission level, that was New Mexico designation 5. There was one addition to an existing one, and that, by the way, was the famous Abo one that now consists of about 5,000,000 acres, two dismissals at the Oil Conservation Division level, one denial at the Oil Conservation Division level.

There are two pending Commission--when I say Commission, Federal Energy Regulatory Commission--final approval. They may or may not. I haven't had any information on that yet. There's also three pending BLM-OCD approval at this time.

In the beginning we had hearings on all of these applications, and everything was going along--should I continue with this, Mr. Stovall?

Q. Please. You're doing just fine.

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A. Everything was going along very fine.

What I mean by that was, if there was any federal lands involved in the tight formation area, regulations set out in the FERC require ruling or recommendations also from the United States

Bureau of Land Management or the Federal agency of the Department of Interior to review and make their recommendations.

The way it was with these first 27, more or less, was that a hearing was held here in Santa Fe, the Oil Conservation Division issued an order, everything was packed away, exhibits, testimony, the Order, was sent to the Albuquerque BLM office. They then sent back to us a recommendation. Usually those recommendations just echoed what we had already authorized.

There were a couple of exceptions. The first one, New Mexico No. 5, the U.S.G.S. wanted more acreage dedicated in the tight formation than what the Applicant requested. It went to the Federal Energy Regulatory Commission level.

I wasn't involved at that time, but to make a long story short it was withdrawn by the Applicant at that level and it was never adopted.

And then, when New Mexico 25--New Mexico 25 is the designation which the Federal Energy Regulatory Commission identifies certain tight formation areas--Four Corners Gas Producers Association requested a portion of the Pictured Cliffs be designated as tight formation.

An order was issued and if I could, Mr. Stovall, refer to Exhibit No. 3?

Q. Please do.

A. The New Mexico Oil Conservation

Division, Mr. Richard L. Stamets as the hearing

Examiner, issued Order No. R-7200, and that

essentially adopted what the application

requested.

The Albuquerque office of the BLM wrote back a letter, and that's also in this exhibit, to Mr. W. Perry Pearce, who was then General Counsel for the Oil Conservation Division by letter of May 3, 1983, with their recommendations to delete some acreage, and also includes some additional acreage that the Applicant did not

request.

All of this was packaged up and sent to the Federal Energy Regulatory Commission, and by letter of March 28, 1984. It includes some comments from the Federal Energy Regulatory Commission to the US BLM. The final authorization from the Federal Energy Regulatory Commission included all areas requested, the additions by the BLM and also what was requested by the New Mexico Oil Conservation Division. They did not delete, as requested from the BLM, the acreage in there.

Things were starting to happen at this time. The BLM was getting more--how would you say?--authority, or they were beginning to make more recommendations in these tight formation cases.

- Q. Or actively reviewing it? Would that be the case, rather than simply accepting OCD orders and recommendations?
  - A. Yes.
- Q. At that time, at the time that NM-25 was submitted back in 1983-84, is that correct?
- A. Effective October 22, 1984.
- Q. The FERC is the final authority to

approve or disapprove these classifications?

A. That's correct.

- Q. At the time that NM-25 was submitted, how did the FERC approach different recommendations from the state jurisdictional agency and the Bureau of Land Management?
- A. They, being the Commission, would review both recommendations and issue a final order from both recommendations.
- Q. In other words, those recommendations could go in differently and FERC would decide which one to adopt or what combination of the two?
  - A. That's right.
- Q. And they adjudicated any differences that existed between the state recommendation and the BLM recommendation, or U.S.G.S. at the time?
  - A. That's correct.
  - Q. Has that changed since NM-25?
- A. It's my understanding it has. From 1984, which was essentially the last tight formation cases that went through this process, the tight formation designation was a dead issue since the NGPA pricing did not really effect or it had been deregulated.

Q. In other words, you couldn't sell it at NGPA tight sands price, and therefore there was no incentive to bring an application, is that what you're saying?

A. That's correct. When we did have an application from Mr. Robert G. Bayless, and I'm going to refer to Exhibit No. 4. Essentially, this application was filed because the IRS had adopted a tax credit, tying tax credits on wells in tight formations utilizing the tight formation FERC rules and regulations and procedures, which, in turn, involved the OCD.

Case No. 10264, Order R-9495--

- Q. Again that's Exhibit 4 that you're referring to, which contains the order and other information?
- A. That's correct. --was issued. This particular filing contained 193 acres, more or less, all federal land, portions of it being on BLM property, portions of it being on Forest Service property.
- Q. How many acres again? Let's go over that again. I thought you said it was 193 acres. I believe it was a little larger than that, wasn't it?

A. I show 193,000 acres.

- Q. Oh, I'm sorry. You said 193 acres.
- A. I'm sorry. In fact, 193,090 acres, and that was known as the Cabresto Tight Gas Area.
- Q. Bayless brought the application to the state, is that correct?
- A. That is correct. The Albuquerque BLM representatives were here that day but did not actively participate in the hearing. The case was taken under advisement, this Order was issued, the packet was put together, sent to the BLM for their recommendation.

In conversations between myself and Mr. Allen Buckingham in the Albuquerque District Office, they had a problem with the area, and I was informed at that time that any applications for tight formations that went into the Federal Energy Regulatory Commission had to be identical. They would no longer accept two types of recommendations. The agencies had to get together and issue one recommendation to the FERC. I was not aware of that policy or procedure at that time.

Q. Is it your understanding from your conversations with Mr. Buckingham, and I

recognize it is not a legal opinion but rather just a recollection from your conversation, that the FERC had advised Mr. Buckingham, and through him, you, that they had determined that they did not have the authority to adjudicate between different recommendations but were merely to approve an agreed-upon recommendation from the state jurisdictional agency and the Federal agency?

- A. That is my understanding, yes, sir.
- Q. What happened to Mr. Bayless' application as a result of that?

A. I contacted the Federal Energy
Regulatory Commission and, to be more particular,
Ms. Marilyn Rand, who is the Director of the
Division of Producer Resolutions. She's
essentially the one who is over that particular
bureau or division or department, if you will, in
the Federal Energy Regulatory Commission that
reviews these type of applications. I wanted to
confirm what Mr. Buckingham was telling me, not
that I didn't believe him but I wanted to find
out some more about this.

In my conversations with her, I also informed her that this particular application was

all federal land, and why did they need recommendation from the OCD, if that be the case? She informed me that she would get back with me and she did the next day, and my letter of July 11, 1991 is my letter to her confirming what I understood her to say, and I've not received any type of correspondence to lead me to believe that what she did tell me was not true.

- Q. In other words, your letter of July 11th, which is part of the packet in Exhibit 4, essentially says what you testified here, that the NMOCD is not required to review tight sands applications where there is no state or fee acreage involved, is that correct?
  - A. That is correct.

- Q. And you've had no response from Ms.

  Rand so you assume she approves or agrees with
  your interpretation of your conversation?
- A. That is correct. Also, my last portion of this exhibit, a letter of October 18, 1991, was essentially the BLM acting as the jurisdictional agency making the application for that particular tight formation designation to the BLM.

The first page of Exhibit No. 4 is from

the Federal Register showing the Bureau of Land Management as the Applicant, and not the state jurisdictional agency. So that broke, as I understand, a precedent.

- Q. When these things were filed before, if you look at NM-25, the state is the Applicant to the FERC for approval?
  - A. And all others, also.
- 9 Q. And all the other agencies involved in 10 it?
- 11 A. That's correct.
- Q. Now you're saying, with federal lands only the BLM is involved?
  - A. Yes.

- Q. What's the effect on the applicants for these tight sands formations if they have to come to hearing before the state and then go through the BLM evaluation? What does that do to the Applicant?
- A. It's a very awkward situation. At the same time as Bayless' application we had another application for a tight formation. That was a little nerve-racking in as much as we went ahead with the procedure.
- 25 In that particular application, the BLM

agreed with our recommendation, so that really wasn't a problem, and that was New Mexico 30, I might add.

- Q. And that involves fee and state lands, is that correct?
- A. It had some fee and state land. The majority of it was federal, however.
- Q. Now that application, if I understand correctly, that application was heard by you as an Examiner for the OCD, and an order was issued?
- A. Actually that was heard by Mr. Jim Morrow, but I did submit the application, with the recommendation from the BLM, to the FERC as the state agency making the application to the FERC for the designated tight formation.
- Q. Now the application can name state and fee lands and federal lands, and, in this case, both agencies submitted identical applications and recommendations?
- A. That is correct. But in this, it was evolving. This was evolving. We had three other applications or four other applications, and in my conversations with Allen Buckingham, we needed to come up with some sort of an agreement or some type of a way to do this because the hearing

process was somewhat awkward because the BLM, having federal land, they also have a staff that can review these things. We're not in the position.

It just made it an awkward position to try to issue an order and then have to change it again if the BLM disagreed with it.

- Q. In other words, the BLM, at least with respect to the federal lands, processed it administratively, and OCD processed it through a hearing?
  - A. Correct.

- Q. The difference is, in the hearing situation, all of the evidence is presented at one time and placed on a record just as we're doing today?
- A. That's correct.
- Q. And in an administrative review, there's ongoing information gathering, a less formal process, which allows information to be supplemented?
- A. That's correct, and that's the way the BLM has proceeded with many of these, as I understand.
- Q. So what you run into when you've got

this joint jurisdictional approach is that the two agencies are using a different procedure and it's difficult to reconcile that administrative information-gathering process with a structured hearing process?

A. That is correct.

- Q. How has the division and the BLM handled that most recently?
- A. The way we've handled it most recently was, we requested the Applicant -- Let me start over. We tried to deal with what we had.

We had a preliminary meeting. The BLM had the application as the OCD did. We had a preliminary meeting with the people involved who went over the application. We then, "we" being the OCD and BLM personnel, made some suggestions, worked with the Applicant, made some suggestions on how they should maybe approach particular geological items, changing some different engineering items, suggesting that we might need some more information in this particular area or that particular area within the designated area, before we actually came to hearing, so those questions and those items could be dealt with before we got into the situation where an order

was issued.

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- Q. After all these preliminary meetings, did the OCD, in fact, conduct a hearing? Let's talk, for example, about an application of Union Oil Company for tight sands designation in Rio Arriba County.
- A. I think you're referring to Case No. 10420 which, by the way, there has not been an order issued. That's Exhibit No. 5.
- Q. Exhibit No. 5 is a piece of the transcript, but let's first talk about how the case--there was a hearing held in 10420?
- A. That's right. In fact, we held that in Albuquerque at the BLM offices so they could become more active in the hearing process.
- Q. And was that the result of an effort to try to bring these two different processes together for the convenience of these agencies and the Applicant?
  - A. That's right.
  - Q. So at that hearing you sat as the Hearing Examiner, is that correct?
    - A. That is correct.
- Q. And there were also BLM personnel present who, in effect, sat and listened to it as

part of their administrative review?

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- A. Four of them, in fact, made up of Allen Buckingham, Jane Clancy, their geologist, an engineer, and also Mr. Buckingham's assistant.
- Q. Just for the record, the engineer's name would be Robert Kent.

So the format of this hearing was an OCD Examiner hearing format reported by a court reporter and conducted under the relaxed rules of procedure and evidence which the OCD uses, is that correct?

- A. Relaxed, yes.
- Q. And the BLM participated and actually had the opportunity to question the witnesses and gather the information which they felt they needed as part of the process for their administrative approval, is that correct?
  - A. That is correct.
- Q. You're saying that no order has been issued in this case yet, but if an order were issued, if you were simply to issue a recommended order to the Director and he issued that order at this point, what would happen now? If you wrote an order based upon your understanding of the testimony and issued it, what would happen to

- that order? In other words, you would submit that to the BLM?
  - A. Yes, I would.

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- Q. They couldn't change that order, could they?
  - A. No, they couldn't.
- Q. But they could make a different recommendations?
  - A. That is correct.
  - Q. But we've been told by the FERC that we can't submit different recommendations to the FERC for approval?
  - A. That's correct.
- Q. Administratively the BLM would either
  have to agree with your order, the OCD order, or
  the OCD would have to change its order to
  something the BLM agreed to, is that correct?
  - A. Either by nunc pro tunc or reopening the case, yes.
- Q. And submitted nunc pro tunc
  procedurally raises some problems since it's
  based upon an existing record?
- A. Yes. I wouldn't recommend a nunc pro tunc in this instance.
- Q. Now, Exhibit 5 is a portion of the

transcript from the December 20th hearing from Case 10420. What is the importance of this particular portion of the transcript and why have you submitted it here?

- A. Mr. Buckingham made a statement at that particular hearing, and one of the reasons I put this in here today is jointly with Exhibit No. 6--and if I may go over Exhibit No. 6 and identify that?
  - O. Please do.

A. This is from Federal Register, Volume 56, No. 61, proposed rule-making changes to the tight formation procedure, bringing the procedure in line with the tax credit.

Some of the more significant changes in there would be the maximum allowed production down below 15,000 feet. The reason it stopped at 15,000 feet in the old days was because anything past 15,000 feet was deregulated. So now they had to bring up wells deeper than 15,000 feet.

Also, the question of infill drilling, whereby economics played a part in the old procedure. Now, the higher priced gas is no longer the issue, the tax credit is the issue, but the present order on the present rulings do

not address that and these proposed rules have not been been adopted by the FERC, and the way I understand from Mr. Buckingham--and that's why I put his statement in here--is his conversations with the NGPA on how these are to be administered and handled and how they are going to proceed with it, which is still somewhat of a mystery.

Even he's suggesting here that this may be a test case for them to change, "them" being the Commission, to change their procedures.

- Q. As I read this testimony, just to touch on it briefly, what he's saying is under the old purposes of the NGPA, the 107 pricing, was a price incentive to encourage drilling when supplies were tight and economic considerations and the cost of recovering the gas were significant, is that correct?
  - A. That's my understanding.
- Q. And under the current situation, it is not the price incentive of the NGPA but rather the nonconventional credit offered under Section 29 of the Internal Revenue Code which offers the incentive, and that is not a price-cost driven incentive, is that correct?
  - A. That's my understanding.

- Q. And therefore, the cost of recovering the gas from tight sands is no longer an important or relevant factor in making the application?
  - A. That's my understanding.

- Q. That's what the notice of proposed rule-making in Exhibit 6 addresses or tries to--
  - A. That's why I included it, yes, sir.
- Q. As far as the procedure which we're recommending for the processing of 107 applications, that's only a small piece of the reason?
  - A. That's correct.
- Q. Under the NGPA, and in fact we are acting under federal law in these proceedings, there is no requirement for a hearing?
- A. That is my understanding.
  - Q. What are you recommending as the manner to handle the 107 applications in the future?
  - A. The way I see it is an administrative procedure, where an application is made, and it would give the Division a little leeway of how to handle each application. And we can reserve, I would like to reserve the fact that we could bring these to hearing, if need be.

But look at the application, how much federal land is involved. If there's very little state and/or fee land, perhaps get the BLM to be the Applicant, in which case the Division would make a recommendation to them, and let their staff--

- Q. Let me interrupt you for just a second, because I think terminology could be a problem. When you talk about "applicant," you've got two applicants, in effect. You have an applicant to the jurisdictional agency, the operator who is requesting the designation, is that correct?
  - A. That is correct.

- Q. And the applicant as you used the term now, before the FERC, it is the jurisdictional agency, either the Department of Interior agency or the state, which is the actual applicant on an application before the FERC to approve the Operator/Applicant's request for a designation?
  - A. That is correct. My apologies on that.
- Q. That's all right. You're talking about an administrative process whereby the operator submits to the appropriate jurisdictional agencies or requests for those agencies to submit an application to the FERC?

A. Yes, and I'll try to use in that term the sponsor of the application to the Federal Energy Regulatory Commission.

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Also, these preliminary meetings, if need be, we could utilize those, "we" being both the BLM and the Division, to hash out, make recommendations, make some suggestions, supplement data that needs be before whichever agency is the sponsor of the application before the Federal Energy Regulatory Commission.

- Q. Now this administrative type approach which the BLM currently uses for thee, is that sort of an administrative approach where you get an application from an operator and then request supplemental information and discuss it with him? Is that something that the OCD has used in other types of applications?
- A. In administrative applications we use that all the time, yes.
- Q. So the OCD is not unfamiliar with the process of administratively gathering information and then approving a request from an operator for a specific--
- A. I don't think so. There might be some applicants who disagree, but I don't think so.

Q. We won't go into that. Is there any precedent for a state jurisdictional agency using an administrative process rather than a hearing process, for acting under the Natural Gas Policy Act?

- A. There are several and I included one, Exhibit No. 7, just for purposes of your question today, a copy of the Natural Gas Policy Act, the Texas approach, which is a nice booklet. I included pages D-11 through D-13 which the Texas Railroad Commission has adopted for naming tight formation designations. That is an administrative process, but they do reserve the right in there to take an application to the Commission for hearing.
- Q. Let's more specifically discuss the recommended procedure that you would recommend. First off, with respect to Order R-6388, I believe the application in this case is for an amendment to that order. Is that actually what we want to do or would you like to rescind that order as it exists today?
- A. I think it would be possible to rescind the order today and adopt an administrative process, which is in essence what I'm asking.

Q. Now, in terms of actually writing an order out of this hearing to specify a procedure for the Division to handle 107 applications, do you believe it's necessary that such order contain a detailed procedural methodology as is contained in Exhibit A, or is it possible for it to simply approve an administrative process subject to procedures established by the Division?

- A. I think it would be possible to approve these by an administrative process. So to answer your question, yes.
- Q. And then the Division could, by decision of the Director, by a memorandum or directive of the Director of the Division, specify more specific detailed information which would be comparable to that contained in Exhibit A of Order R-6388-A but which could be changed from time to time as the need required?
- A. Yes. On top of that, this being a federal type of--how would you say?--a procedure in which we are the acting agency, I don't think we're bound to have an order directing how the application is to be processed through an "R" order.

I think a more relaxed administrative procedure, perhaps by memorandum that we could change at a whim, without having some sort of a hearing. What I mean by a whim is, if the Commission--

- Q. Based upon good reason? Is that what you're saying?
  - A. Yeah.

- Q. If the Director feels there's a good reason to change something, he can do it without having to go back to a hearing to make a minor change to the process?
- A. Yes. And what I meant by whims were any federal whims that might come along.
- Q. Is there any precedent within the Division for having an administrative process and then guidelines or non-Order-driven procedures for handling applications in an administrative matter?
- A. The Environmental Bureau in the most recent past has set up procedures adopted in this matter.
- Q. So it's not something new and totally unique for the Division to have an order that says you can do this administratively, and have

guidelines to guide you to do it, is that correct?

A. That's correct.

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- Q. Have you developed any guidelines which you would submit as the type of thing that you would ask the Director to adopt for the procedure?
- A. Why, as a matter of fact, yes, I have. Exhibit No. 8 shows that. Which there is a stack in the back of the room there.
- Q. Not any more. So, Exhibit No. 8 is the procedure you would recommend if, in fact an order is issued today approving administrative processing of tight sands applications, this Exhibit 8 is how you would recommend that the Division process these applications?
- A. That is correct, yes, sir. And this, by the way, is a draft procedure.
- Q. And you do not ask that this procedure be incorporated into the order itself that will come out of this hearing?
  - A. That is correct.
- Q. To the best of your knowledge, do these procedures satisfy the requirements of the NGPA?
  - A. I believe they do.

Q. Specifically, let's look at one particular part of this. I'm not referring to a specific portion of it but rather the notice requirements.

The Division has specific notice requirements in its general rules and regulations regarding notice of hearings, is that correct?

A. That is correct.

- Q. Does the NGPA and the regulations issued thereunder, do they have notice requirements with respect to applications under the NGPA?
- A. Yes, they do. For instance, when an application for a wellhead category is made with the BLM, it's required to be published in the county and then they have 15 days to respond.

The way I understand it now, the BLM, in their administrative process for tight formations, require notification in the county or counties in which a designated area is in. I have essentially adopted what the BLM has accepted.

Q. And the Operator/Applicant, he is required to provide that notice in the publication, is that correct?

A. That is correct.

- Q. Do you see any problem with adopting, within this procedure, notice requirements which are consistent with the NGPA rather than having a different set of notice requirements for OCD and BLM, for the approval of these applications?
- A. I see no problem. If I might add, I have suggested 20 days. I would have to check with the BLM. 20 days we've adopted for other administrative procedures such as unorthodox locations, in our procedures here at the Division.
- Q. And the NGPA only requires 15 days'
  notice, is that correct?
  - A. That is correct, so that's subject to change.
  - Q. Is there anything else with respect to the procedures and recommendations that you would like to add to your testimony?
    - A. No.
  - MR. STOVALL: I would move the admission of Division Exhibits 1 through 8.
- EXAMINER CATANACH: Exhibits 1 through 8 will be admitted as evidence.
- 25 MR. STOVALL: I have no further

1 questions.

2 EXAMINER CATANACH: Are there any 3 questions of the witness? Mr. Kellahin.

## EXAMINATION

## BY MR. KELLAHIN:

- Q. Mr. Stogner, I want to thank you for taking the initiative to change the procedure to give us more flexibility. Let me understand, however, how you propose to do some of the items under the administrative processing.
- A. Okay. And you're referring to Exhibit
  12 8?
  - Q. Yes, sir. Under the procedure, give me an example of how this would work. If I have all federal acreage within my area of application, it would then go straight to the BLM?
    - A. That is correct.
  - Q. The paragraph C(4) does not yet clarify that this publication, or proof of publication, is triggered only in those instances where the Division would be a sponsoring agency, if you will.

Is that your intent, that the notice in this procedure here is triggered only when we have the OCD as the sponsoring agency?

A. That is correct. The way I have visualized this, and you caught on that, if you have all federal acreage, then you file only with the BLM and that's the procedure in part C, subparagraph 2. It's my intent that after that the Division not be pulled into this process and--

MR. STOVALL: In other words, if there's no application before the Division, there's no notice required by the Division procedure.

- A. That's right. And perhaps, as Mr. Kellahin suggested, make it more clear.
- Q. Let me understand. If I have all federal acreage and I have to satisfy the BLM's publication notice requirements, does that notification require objections to be filed with the BLM, do you remember?
  - A. I'm not sure.

MR. STOVALL: Mr. Kellahin, If I may respond to you, the notice requirements contained in this proposed procedure would only apply to applications which are filed with the OCD.

It is the intent of the OCD, and I think it's Mr. Stogner's testimony, that that

notice requirement be as consistent as possible with the NGPA-BLM notice requirements, so that the notice you file for one, satisfies both.

The only difference, I think, is the 20 versus the 15 days being the timing of it. The effect would be that the same notice would work for both applications, if both agencies are involved.

- Q. When we look at C(5), am I also clear in understanding that we're dealing only with objections filed for those applications in which the Division is the sponsoring agency?
  - A. That is correct.

- Q. And if there's an objection filed under a Federal-sponsored application, the BLM will have to figure out how to deal with that objection?
- A. Yes, you're correct on that. And there's no reason why they, "they" being the BLM, can suggest that we have a hearing here. Why they would, I don't know. But I can see where we could have a hearing here on all federal lands. God knows why.
- Q. In the past the BLM has not had a very convenient hearing process to handle objections

with regards to the BLM matters, and this hearing process, then, is triggered only with applications that deal with fee and state acreage in which you're the sponsoring agency?

- A. That is correct.
- Q. The transcript generated now under the hearing procedures, is that forwarded on to FERC in support of the application?
  - A. Yes, it is.

- Q. Do you see any weakness in the process if an administrative procedure is adopted in which a transcript is no longer generated to be submitted to FERC in support of the application?
- A. No. And the reason I say that is, as far as I understand the Texas procedure, which is administrative, they have no transcript with theirs. And there are some other states, and I can't remember them offhand, that do not have a transcript involved. I do not see that as a weakness.

MR. STOVALL: I might point to Section D, and again we're sort of in a rule-making, Section D discusses what evidence must be submitted by the Applicant with respect to these applications, and that is the evidence which

would go to the FERC. We've had some discussion about requiring that evidence to be submitted under affidavit so it becomes sworn testimony with respect to, particularly, the scientific opinions rendered thereunder.

- Q. I understood this to be tracking the existing procedure. I was just curious, as a practical matter, as to what usefulness the existing transcripts were in defending the application when it went to FERC?
- A. I cannot speak for the FERC, but I do understand that they, the FERC, the Commission, reviews everything that is sent to them and that includes the transcript, and I'm aware of that. That is the reason I've also put in this procedure that each exhibit have along with it a discussion by the preparer, if you will, so, therefore the preparer is making their interpretation of this exhibit.

I don't think the Applicant, the operator, wants any government official or anybody else making their interpretation for them, and that, I believe, would get around the transcript with a discussion attached to a particular exhibit; "exhibit" being a map, plat,

any type of scientific data.

MR. STOVALL: Question on that again if I might, to supplement Mr. Kellahin, we've talked about the administrative process as being one of an exchange of information or request for additional information. An Applicant would submit it with his explanation and then if the state, as a jurisdictional agency, requested additional information, either explanation or additional exhibits, those also would go as part of the package.

So it's not a one-time deal, like a transcript is a one-time recording of what the Applicant has to say--

A. That is correct.

MR. STOVALL: --with the chance to question and clarify. You'll have that same process where the Applicant submits something and there's questioning and clarification, but it's in written documents rather than a written transcript of oral testimony.

- A. That's right.
- Q. (BY MR. KELLAHIN) In reviewing the past applications that have been processed, do you find any indication that any of those cases

were ever opposed by any individual or company?

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A. There's one particular application and I believe that involved Unocal.

MR. STOVALL: I believe there was an earlier one, and let me back up on that, Mr. Kellahin. My recollection from Division records, and it is only my recollection, that in a couple of cases in Northwest New Mexico, Gas Company of New Mexico was concerned about applications because of some contractual situations they had. I don't believe in either case they actually filed an objection or participated in the hearings as an opponent.

So the answer to your question is, legalistically speaking, no, there have been no formal objection to any application.

MR. KELLAHIN: I raise that with you only in the context of establishing an administrative procedure that is independent of the R orders and is outside of the rule book. If this is not a customarily opposed process, then I think it's probably convenient to establish an administrative procedure for only handling this type of case.

MR. STOVALL: And I think the fact that

1 it's outside the rule book is because it is the application of federal law and no state law, and 2 3 that's why we have chosen for not to implement a rule into the general rules and regulations for 5 this procedure. MR. KELLAHIN: 6 Thank you. I have no 7 further questions. EXAMINER CATANACH: Any other questions 8 of this witness? 9 10 I just have a couple. 11 EXAMINATION BY EXAMINER CATANACH: 12 Mr. Stogner, is it my understanding 13 Q. that all applications with simply federal acreage 14 15 will be handled by BLM solely? 16 Α. That is correct. 17 When will the state sponsor an Q. 18 application, when there's any state or fee lands in the area? 19 20 Α. That is negotiable. The way I 21 visualize this, say an application comes in and

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has 98 percent federal land and two percent fee,

I don't want, nor do I intend, to be the sponsor

like to see the Division sponsor an application

I would not

of that--I should say the Division.

where the BLM has a majority of the acreage and they can do the majority of the work.

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We simply do not have the personnel or the time. In those particular instances, say, where there's 10 percent state, 90 percent Federal, I believe that I can, "I" being the Division, could sponsor an application. But we would have to test a few of these first.

That's what I would like to see, if there's the majority of federal land, let the BLM be the sponsoring Applicant and the Division work alongside the BLM in reviewing the application and making the recommendation to them.

The way it stands now and probably the way it would be, the Division would be the sponsoring Applicant to the FERC in these low state/fee acreage applications.

MR. STOVALL: Technically, and let me supplement that, technically if there's as much as one acre or any piece of state or fee lands, the state could become involved in the process but administratively you would probably ask the BLM to do the work, is that correct?

THE WITNESS: That is correct. And the Division would have to have some hand in it one

way or the other; correspondence or review. It would be required to be reviewed, yes, by the Division.

- Q. How is the Applicant going to know who he has to file with? Is that going to be contained in the proposed memorandum or the order?
- A. Yes. I believe in the procedure portion, paragraphs 2 and 3, I believe, make that clear. I'm sorry, 1 and 2.
- Q. Do you foresee a situation where the Division and the BLM cannot agree on an application?
  - A. All the time.

- Q. And what procedures are you going to use or is the Division going to use to resolve those issues?
- A. That would be negotiated between the responsible parties here at the Division talking technical issues with the BLM. It would be a procedure in which everybody would sit down and have to come out with more than one type of recommendation, and more than likely I could see this being at the BLM office in their setting, yeah, behind closed doors.

MR. STOVALL: Let me ask a follow-up, if I might, Mr. Examiner. In a situation where that would occur, would you conceive of a situation where perhaps the BLM could make a recommendation with respect to the federal lands involved, and the state could make a recommendation with respect to state and fee lands, and they could each agree to accept the other's recommendations with respect to the lands over which they have jurisdiction?

THE WITNESS: That's one of the procedures in which I would be prepared in going into these negotiations, yes.

- Q. (BY EXAMINER CATANACH) Now, as I understand it, the procedure you want to use, you want to rescind 6388-A, is that correct?
  - A. That's correct.

- Q. And 6388-B, in effect, what would that order do?
- A. Rescind 6388-A and let it be known that an administrative procedure has been adopted, that would be adopted at this particular time and could be changed in accordance with existing law or any law, being federal law.
  - Q. But the procedure itself would not be

1	contained within 6388-B?
2	A. That is correct, it would not be
3	incorporated within the order.
4	Q. It would be in the form of a memorandum
5	or some type of other document?
6	A. Yes, it would. Perhaps call it
7	something like what Texas came up with. Maybe
8	call it "NGPA, The New Mexico Way." I don't
9	know.
10	MR. CATANACH: I believe that's all I
11	have. Can I get you or your attorney to submit a
12	rough draft order in this case?

THE WITNESS: I would suggest that my attorney submit an order.

> EXAMINER CATANACH: I would agree. Ι FURTHER EXAMINATION

## 17 BY MR. STOVALL:

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- Q. One thing I want to put in, and I'm not sure it's real critical, but under the Division procedures if a party who was adversely affected by an order or didn't like an Order, they could take it de novo before the Commission, is that correct?
- Α. That is correct.
- Assuming an order was issued by the Q.

Division in concurrence with discussions with the BLM under the current procedure, and the applicant didn't like that order, they could take it de novo, but what would be the effect of a Commission de novo order?

- A. Essentially the same as the Division order. There would still be an argument and they would have to, essentially, learn to deal with it.
- Q. In other words, if the Commission revised or changed the Division order after a de novo hearing, that doesn't resolve the conflict between the BLM--
- A. That's correct. The conflict would still be there, only at a higher level.
- Q. And then you could take it to the courts, so that's another potential complication in the existing procedure?
- A. That is correct. I might add that the Commission has a procedure to hear any objections.
  - Q. The FERC Commission?
  - A. Yes.

Q. One other thing. With respect to the order that may come out of this hearing, would it

be appropriate to include the concepts contained in paragraphs C(1) and (2) of your procedure in the order itself, that says if there are any state or fee lands involved, the application shall be filed with the Division; and if there are no state or fee lands, then it shall be filed only with the BLM or appropriate entity?

- A. That is my intent, yes.
- Q. Is that something that perhaps should be set in the order?
  - A. Definitely.

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- Q. Rather than in just the procedure, so an applicant/operator can go to the order and know whether to file with the state or not?
- A. Yes, I see what you're saying. I believe that could be acceptable.
- Q. The only other question I have with regard to procedure, and again this could be changed if the order is adopted, paragraph C(6), should the director be allowed the discretion to set an objected-to-application to hearing or give time to process and evaluate the objection before it's automatically set for hearing?
  - A. Yes.
    - Q. It may be set for hearing rather than

it shall be set for hearing?

A. Yes. Like I said, this is just a rough.

MR. STOVALL: Mr. Examiner, I would like to, at this time, ask the parties who have appeared here, if it would be of any value to them, if there would be a request for keep the record open for submittals? With respect to the order itself, there will always be the opportunity to address the procedure. Is there any need to keep the record open? And I would ask the attorneys who have appeared here to respond to that.

MR. KELLAHIN: Mr. Catanach, Mr.

Stovall, I believe there is the need for a short period of time. You've raised a question just now that I have not thought through, and that is, under the new process, if the Division should deny the operator/applicant's request, what is the administrative remedy for the operator/applicant? How does he, say, exhaust his administrative remedies?

Does he then file an application before the OCD and take his appeal through the Oil Conservation Commission, or is his administrative

recourse to go to FERC and fight for his case at that point?

MR. STOVALL: I think that's an issue and I think the question is, as Mr. Stogner explained, we don't have any control over the BLM and if there's not agreement, FERC's not going to act. So that really does create a problem. But I don't have any problem keeping the record open to give you time to think about that.

MR. KELLAHIN: I don't understand how that's going to work. I presume, under the existing order, if the Division denies an application that the remedy, then, obligates the operator/applicant to file for a Commission de novo hearing and see what happens there.

This is such a unique situation that apart from that issue, the burden of a hearing process is not useful in processing these unique kinds of cases. There are some things yet I have not revolved, this appeal process is one of them. So, to answer your question, I would like to have some time to think about it and respond to the Examiner. I would think two weeks would satisfy that.

MR. STOVALL: Mr. Carr?

MR. CARR: I concur with Mr. Kellahin. 1 MR. STOVALL: Mr. Pearce? 2 3 MR. PEARCE: Yes. MR. STOVALL: With that in mind, Mr. 5 Examiner, I have nothing further. I would request the record be left open for two weeks for 6 7 the purpose of receiving comments and proposals 8 from parties appearing here. I guess we have to 9 leave it for parties, and somebody is going to have to go to the people the attorneys 10 11 represented here. It is a hearing record, so. 12 MR. KELLAHIN: If there are others in 13 the room that want to submit it, they can submit it to any of the lawyers, and we will be happy to 14 forward it on. I don't think this rule-making 15 procedure be strictly construed that it requires 16 17 an interested party to have to have counsel in 18 order to participate. 19 EXAMINER CATANACH: Anything further, Mr. Stovall? 20 21 MR. STOVALL: No, I think I've dragged it out sufficiently long. Thank you. 22 23 EXAMINER CATANACH: We'll leave the 24 record open for two weeks, and anyone who is

present today can submit comments or proposals.

MR. CARR: Mr. Catanach, Enron has asked me to make a very brief statement on their behalf. Is this the appropriate time?

EXAMINER CATANACH:

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MR. CARR: As the Division is aware, Enron currently has an application pending before this agency and also the BLM, seeking designation of a tight formation in Lea County, New Mexico.

Sure is.

This application has resulted in the pre-hearing meetings with agency personnel in Albuquerque and also has resulted in a hearing on December 20th.

We support the adoption of an administrative procedure for handling applications for tight formations. When applications of this nature are filed, time is really of the essence, and we're concerned with what may happen to one of us similar to what happened to Mr. Bayless and his application.

We think the administrative procedure will result in a more efficient presentation and certainly should expedite the approval process, and for this reason we think that a speedy adoption of an administrative procedure would be appropriate.

1 EXAMINER CATANACH: Thank you, Mr. 2 Any other statements at this time? MR. KELLAHIN: On behalf of Conoco, Mr. 3 Examiner, we support an administrative procedure 5 to replace the hearing process that now exists in the order. Conoco, like Mr. Carr's clients, is 6 currently involved under the current procedure. 7 It is cumbersome. It is, we perceive, resulting 8 in delays in processing our request, and 9 particularly when it involves a joint effort by 10 11 the BLM and the OCD. The informal process in 12 handling the technical data is going to expedite 13 final action on these applications. 14 The hearing process is not a useful 15 device, it's not needed, they're seldom, if ever opposed, and the necessity of a transcript 16 doesn't exist in this type of case. So we would 17 18 request and support the adoption of an 19 administrative process. 20 **EXAMINER CATANACH:** Thank you, Mr. Is there anything further? 21 Kellahin. 22 MR. PEARCE: If it please the Examiner, 23 Mr. Kendrick has a statement on behalf of El Paso Natural Gas. 24

Mr. Examiner, El Paso

MR. KENDRICK:

1	Natural Gas supports the Oil Conservation
2	Division in setting up administrative approval
3	for this type operation.
4	EXAMINER CATANACH: Thank you, Mr.
5	Kendrick.
6	MR. STOVALL: H. L. "Babe" Kendrick,
7	for the record. One other thing, Mr. Examiner,
8	for the next scheduled hearing Mr. Stogner is the
9	designated Examiner, and I'm going to request
10	that you walk in the room and take this case
11	under advisement, since he's the witness in the
12	case. I think it's probably a little better that
13	his name not appear on the order.
1 4	EXAMINER CATANACH: That can be
15	arranged. Anything further? Thank you all for
16	your participation today.
17	(And the proceedings concluded.)
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20	A da la companya da l
21	do hereby certify that the foregoing is  a complete record of the proceedings in
22	the Examiner hearing of Case No. 10432 heard by me on 1982
23	Daniel Hotel
24	Oil Conservation Division
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# CERTIFICATE OF REPORTER 1 2 3 STATE OF NEW MEXICO ) SS. COUNTY OF SANTA FE 5 6 I, Carla Diane Rodriguez, Certified 7 Shorthand Reporter and Notary Public, HEREBY 8 CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division 10 was reported by me; that I caused my notes to be 11 transcribed under my personal supervision; and 12 that the foregoing is a true and accurate record 13 of the proceedings. 14 I FURTHER CERTIFY that I am not a 15 relative or employee of any of the parties or 16 attorneys involved in this matter and that I have 17 no personal interest in the final disposition of this matter. 18 19 WITNESS MY HAND AND SEAL January 21, 1992. 20 21 22 23 24

CSR No.

## STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

CASE NO. 7029 Order No. R-6388-A

IN THE MATTER OF THE HEARING CALLED
BY THE OIL CONSERVATION DIVISION ON ITS
OWN MOTION TO CONSIDER AMENDMENTS TO ITS
SPECIAL RULES AND PROCEDURES FOR THE
DESIGNATION OF "TIGHT FORMATION,"
PROMULGATED BY DIVISION ORDER NO. R-6388
TO COMPLY WITH FERC ORDER NO. 99, ISSUED
AUGUST 15, 1980, PROMULGATING FINAL REGULATIONS
WITH RESPECT TO SECTION 107 OF THE NGPA.

## ORDER OF THE DIVISION

## BY THE DIVISION:

This cause came on for hearing at 9 a.m. on October 1, 1980, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 10th day of February, 1981, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

## FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That by its Order No. R-6388, dated June 30, 1980, the New Mexico Oil Conservation Division promulgated its "Special Rules and Procedures for Tight Formation Designation Under Section 107 of the Natural Gas Policy Act of 1978."
- (3) That the rules and procedures adopted by said order were predicated upon the interim regulations issued February 20, 1980, by the Federal Energy Regulatory Commission (FERC) and were intended to be amended should the final regulations promulgated by the FERC differ substantially from the aforesaid interim regulations.
- (4) That by its Order No. 99, issued August 15, 1980, the FERC promulgated its final rules on high-cost natural gas produced from tight formations, said rules to become effective September 22, 1980.

NMOCD EXHIBIT NO. <u>vvē</u>

CASE NO. 10432

January 9, 1992

-2-Case No. 7029 Order No. R-6388-A

- (5) That said final rules differ in certain respects from the interim regulations, and certain amendments to the Division's rules and procedures as promulgated by Order No. R-6388 are therefore necessary, to wit:
- (6) That Section B, <u>Definitions</u>, should be amended by the addition of the following definition:
  - 6. "Infill drilling" means any drilling in a substantially developed formation (or a portion thereof) subject to requirements respecting well-spacing or proration units which were amended by the Division or the Oil Conservation Commission after the formation (or portion thereof) was substantially developed and which were adopted for the purpose of more effective and efficient drainage of the reservoirs in such formation. Such amendment may provide for the establishment of smaller drilling or production units or may permit the drilling of additional wells on the original units.
- (7) That subparagraph c of subsection 1, Section D, Evidence, should be amended to read in its entirety as follows:
  - "c. a map or list which clearly locates or describes wells which are currently producing oil or gas, or both, from the formation within the geographical area of the formation, and"
- (8) That subparagraph d of subsection 1, Section D, Evidence, should be amended to read in its entirety as follows:
  - "d. a report of the extent to which an applicant believes existing State and Federal regulations will assure that development of the formation will not adversely affect or impair any fresh water aquifers (during both hydraulic fracturing and waste disposal operations) that are being used or are expected to be used in the foreseeable future for domestic or agricultural water supplies; and"
- (9) That old subparagraph e of subsection 1, Section D, Evidence, reading "any other information. . . . " should be renumbered "f" and read in its entirety as follows:

-3-Case No. 7029 Order No. R-6388-A

- "f. any other information which the Division may require."
- (10) That a new subparagraph e of subsection 1, Section D, Evidence, should be added, reading in its entirety as follows:
  - "e. if the formation has been authorized to be developed by infill drilling prior to the date of recommendation, information and data demonstrating that the formation cannot be developed without the incentive price established in 18 CFR §271.703(a)."
- (11) That subparagraph c of subsection 2, Section D, Evidence, should be amended to read in its entirety as follows:
  - "c. No well drilled into the recommended tight formation is expected to produce, without stimulation, more than five barrels of crude oil per day."
- (12) That a new subparagraph e should be added to subsection 2, Section D. Evidence, reading in its entirety as follows:
  - "e. If the formation or any portion thereof was authorized to be developed by infill drilling prior to the date of recommendation and the Division has information which in its judgment indicates that such formation or portion subject to infill drilling can be developed absent the incentive price established in 18 CFR §271.703(a), then the Division shall not include such formation or portion thereof in its recommendation."
- (13) That the "Special Rules and Procedures for Tight Formation Designations Under Section 107 of the Natural Gas Policy Act of 1978," promulgated June 30, 1980, by Order No. R-6388, and amended as described above, should be re-promulgated reading in their entirety as depicted on Exhibit A, attached hereto and made a part hereof.

## IT IS THEREFORE ORDERED:

(1) That the "Special Rules and Procedures For Tight Formation Designations Under Section 107 of the Natural Gas Policy Act of 1978," as depicted by Exhibit A attached hereto and made a part hereof, are hereby adopted by the New Mexico Oil Conservation Division, effective immediately.

-4-Case No. 7029 Order No. R-6388-A

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OLL CONSERVATION DIVISION

/JOE D. RAMEY, Director

SEAL

ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION P. O. Box 2088 SANTA FE, NEW MEXICO 87501

SPECIAL RULES AND PROCEDURES FOR TIGHT FORMATION DESIGNATIONS UNDER SECTION 107 OF THE NATURAL GAS POLICY ACT OF 1978

Amended 2-1-81

## A. General

Applications for tight formation designations under Section 107 of the NGPA and applicable FERC rules and regulations shall be accepted by the Division at its Santa Fe, New Mexico office after June 30, 1980. These special rules apply only to tight formation designations and do not apply to individual well filing requirements for price category determination.

## B. Definitions

- 1. "Crude Oil" means a mixture of hydrocarbons that exists in the liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separation facilities.
- "Division" means the Oil Conservation Division of the Energy and Minerals Department of the State of New Mexico.
- 3. "FERC" means the Federal Energy Regulatory Commission.
- 4. "USGS" means the office of the United States Geological Survey in Albuquerque, New Mexico.
- 5. "Formation" means any geological formation or portion thereof described by geological as well as geographical parameters which is the subject of a tight formation designation application.
- 6. "Infill drilling" means any drilling in a substantially developed formation (or a portion thereof) subject to requirements respecting wellspacing or proration units which were amended by the Division or the Oil Conservation Commission after the formation (or portion thereof) was substantially

Order No. R-6388-A Exhibit A developed and which were adopted for the purpose of more effective and efficient drainage of the reservoirs in such formation. Such amendment may provide for the establishment of smaller drilling or production units or may permit the drilling of additional wells on the original units.

## C. Procedure

- To the extent that the Division's general rules of procedure for public hearings are not altered or amended by these special rules, such general rules of procedure shall be applicable and are incorporated herein by reference.
- All applications for tight formation designation in the State of New Mexico, in which Federal, Indian, state, or fee lands, or any combination thereof, are involved, shall be filed with the Division.
- 3. All applications for tight formation designation shall be set for public hearing.
- A complete set of exhibits which an applicant proposes to offer or introduce at a hearing, together with a statement of the meaning and purpose of each exhibit, shall be submitted to the Division (and to the USGS when federal or Indian lands are involved) when the application is filed or at least 15 days prior to a hearing. These exhibits shall cover all aspects of the required evidentiary data described in Section D below. Three additional complete sets of such exhibits and statements, enclosed in an unsealed postagepaid packet, shall also accompany the application or be presented at the hearing; this packet and its contents will be forwarded to the FERC by the Division after the hearing, together with the Division order recommending disposition of the application.
- 5. Where practicable, applications may be consolidated for hearing at the discretion of the Director of the Division.
- 6. Within 15 days after its issuance, any order promulgated by the Division pursuant to these special rules shall be submitted by the Division to the FERC in accordance with Section 271.705 of the FERC rules

and regulations applicable to NGPA for approval or disapproval of a tight formation designation.

## D. Evidence

- 1. Evidence offered by an applicant at a hearing shall include:
  - a. a map and geographical and geological descriptions of the area and formation for which the designation is sought; and
  - geological and engineering data to support the application; and
  - c. a map or list which clearly locates or describes wells which are currently producing oil or gas, or both, from the formation within the geographical area of the formation, and
  - d. a report of the extent to which an applicant believes existing State and Federal regulations will assure that development of the formation will not adversely affect or impair any fresh water aquifers (during both hydraulic fracturing and waste disposal operations) that are being used or are expected to be used in the forseeable future for domestic or agricultural water supplies; and
  - e. if the formation has been authorized to be developed by infill drilling prior to the date of recommendation, information and data demonstrating that the formation cannot be developed without the incentive price established in 18 CFR §271.703(a).
  - f. any other information which the Division may require.
- 2. Evidence shall be based on each of the following geological and engineering guidelines:
  - a. The estimated average <u>in situ</u> gas permeability, throughout the pay section, is expected to be 0.1 millidarcy or less.
    - Permeability may be established and demonstrated by any customary or acceptable methods, techniques, or testing acceptable in the oil and gas industry.

b. The stabilized production rate, either at atmospheric pressure or calculated against atmospheric pressure, of wells completed for production in the formation, without stimulation, is not expected to exceed the production rate determined in accordance with the following table:

If the average depth to the top of the formation (in feet):

The maximum allowable production rate (in Mcf/day) may not exceed:

	but does not
exceeds:	exceed:
0	1000
1000	1500
1500	2000
2000	2500
2500	3000
3000	3500
3500	4000
4000	4500
4500	5000
5000	5500
5500	6000
6000	6500
6500	7000
7000	7500
7500	8000
8000	8500
8500	9000
9000	- 9500
9500	10000
10000	10500
10500	11000
11000	11500
11500	12000
12000	12500
12500	13000
13000	13500
13500	14000
14000 14500	14500 15000
14700	17000

c. No well drilled into the recommended tight formation is expected to produce, without stimulation, more than five barrels of crude oil per day.

- d. If an application meets the guidelines contained in subparagraphs 2 b and 2 c above, but does not meet the guidelines contained in subparagraph 2 a, an applicant may, in the alternative, show that the formation exhibits low permeability characteristics and that the incentive price is necessary to provide reasonable incentive for production of the natural gas from the formation due to extraordinary risks or costs associated with such production.
  - (1) An application based on the guidelines outlined in subparagraph 2 d above shall include data to support the contention that the guidelines contained in paragraph 2 b and 2 c above are met, and in addition thereto, shall contain:
    - (a) the types and extent of enhanced production techniques which are expected to be necessary, and
    - (b) the estimated expenditures necessary for employing those techniques, and
    - (c) an estimate of the degree of increase in production from use of such techniques together with engineering and geological data to support that estimate.
- e. If the formation or any portion thereof was authorized to be developed by infill drilling prior to the date of recommendation and the Division has information which in its judgment indicates that such formation or portion subject to infill drilling can be developed absent the incentive price established in 18 CFR §271.703(a), then the Division shall not include such formation or portion thereof in its recommendation.

Regulations 223 2-19-91		Support I	Applicability. Maximum lawful price.	Recordkeeping. [Reserved.]	Subpart G—High-Cost Natural Gas	Applicability. General rules.	Tight formations. Qualified production enhancement gas.	Procedures for designating tight formations. [Revoked.]		Applicability.	Making the price. Definitions.	Special rules. Continuing qualification. Jurisdictional agency determinations and Commission review. Maximum efficient rate flow.	Subnart I—Other Categories of Natural Gas	Surpart 1 - Cure Caregories of Matural Cas	Applicability Maximum Jawful price	Records Free Control of the Control	Special rule. Subpart J—[Reserved]	Subpart K-Allowances for State Severance Taxes and Certain	Production-related Costs	Applicability. Definitions	State severance taxes. Record retention	Production-related costs.  Compliance procedures under the Production-Related Costs Board. Adjustments.	ORITY: Natural Gas Act, 15 U.S. C. 717-717w; Department of	Energy Organization Act, 42 U. S. C. 7101-7352; E. O. 12009, 3 CFR 1978 Comp., p. 142; Natural Gas Policy Act of 1978, 15 U.S.C. 3301-3432. [The next page is 14,145.]	
14.142		j	271.601 271.602	271.603 271.604	Sec.	271.701 271.702	<b>271.703</b> 271.704	271.705	Sec.	271.801	271.803	271.804 271.805 271.806 271.807		Sec.	271.901	271.903	Z11.904	Subp	Sec.	271.1100	771.1102	771.1104 771.1105 771.1106	Астн	Energy Or Comp., p. 1	_ 24,110
ing Prices	[0]	•	Summary Tables and Calculations	Ceiling prices for certain categories of natural gas. Calculation of inflation adjustment for certain maximum lawful prices.	tain Natural Gas Produced from	ental Shelf				e Production Wells		ction well.	ents. g proration units.	ed or Dedicated to Interstate	90.		to obtain the solution of	Special rule regarding carrying charge adjustment for advance payments.			BEFORE EXAMINER CATANACH	OIL CONSERVATION DIVISION	MAISTO EXHIBIT NO. 2	CASE NO. /CY32	¶ 24,110
Part 271—Celling Prices [¶ 24,110]		Subpart A—Summary Tab	Ceiling prices for certain categories of natural gas. Calculation of inflation adjustment for certain ma	Subpart B—New Natural Gas and Certain Natural G	the Outer Continental Shelf	Applicability.	Maximum lawful price. Definitions.		Subpart C-New, Onshore Production Wells		Applicability.  Maximum lawful price.  Definition of new, onshore production well.	Waivers of well-spacing requirements. Special rule applicable to existing proration units.	Subpart D—Natural Gas Committed or Dedicated to Interstate	Commerce		Applicability.  Maximum lawful prices.	Special rule regarding carrying ments.		Subpart E—Sales Onder Existing Intrastate		Maximum lawful prices. Recordkeeping. Determination of contract price	[Reserved.] [Removed.]		L Federal Energy Regulatory Commission	
			ပို	271.101 271.102	Subpart		271.201	271.202 271.203			Sec.	271.301 271.302 271.303	271.304 271.305	Subr		Sec.	271.401	271.403	•		271.501	271.502 271.503 271.504	271.505 271.506		Federal En

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Regulations

273 2.19.91

# [¶ 24,173]

Regulations

# § 271.703 Tight formations.

- (a) Maximum lawful price for tight formation gas. (1) The maximum lawful price, per MMBtu, for the first sale of tight formation gas for which there is a negotiated contract price or a pipeline production price shall be the esser of:
- (i) The negotiated contract price or the pipeline production price, as applicable: or
- (ii) 200% of the maximum lawful price specified for Subpart C-NGPA Section 103(b)(1) of Part 271 in Table I of § 271.101(a).
- (2) The maximum lawful price does not apply to:
- (i) New tight formation gas from a well the surface drilling of which began on or after May 13, 1990; and
  - (ii) Recompletion tight formation gas from a well the surface drilling of which was begun before July 16, 1979, if the recompletion work for the well from such designated formation was begun on or after May 13, 1990.
- (u) Deimitions. (1) "Tight formation gas" means natural gas that a jurisdictional agency has determined in accordance with Parts 274 and 275 to (b) Definitions. (1) "Tight formation gas" means natural gas be new tight formation gas or recompletion tight formation gas
- (2) "New tight formation gas" is natural gas:
- (i) Which is new natural gas, (as defined in section 102(c)), certain OCS gas qualifying for the new natural gas ceiling price (as defined in section 102(d)), or gas produced through a new onshore production well (as defined in section 103(c)); and
- (ii) Which is produced from a designated tight formation through a well the surface drilling of which began on or after July 16, 1979.
- (3) "Recompletion tight formation gas" is natural gas which is produced from a designated tight formation through a well, the surface drilling of which was begun before July 16, 1979,
- (i) If such well was not completed for production from such designated formation prior to July 16, 1979, or
- (ii) If such well was completed for production from such designated formation prior to July 16, 1979, such gas is produced from a completion location completed after December 27, 1983, and such gas could not have been produced from any completion location which was in existence in the wellbore on or before December 27, 1983.
- (4) "Formation" means any geological formation, or portion thereof described by geological as well as geographical parameters.
- mined by the appropriate jurisdictional agency, pursuant to paragraph (c)(3) of this section. Appropriate jurisdictional agencies are identified in § 274.501 (5) A "designated tight formation" is a natural gas formation as deter-

Federal Energy Regulatory Commission

§ 271.703 ¶ 24,173

Regulations

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- (6) "Infill drilling" means any drilling in a substantially developed after the formation (or portion thereof) was substantially developed and which were adopted for the purpose of more effective and efficient drainage of the reservoirs in such formation. Such amendment may provide for the establishment of smaller drilling or production units or may permit the drilling of cormation (or a portion thereof) subject to requirements respecting wellspacing or proration units which were amended by the jurisdictional agency additional wells on the original units.
- (c) Determination of tight formations.
- (1) General. Determinations by a jurisdictional agency must be made in the form and manner prescribed in Part 274 of this chapter.
- (2) Guidclines. (i) The guidelines for tight formations are as follows:
- (A) The estimated average in situ gas permeability, throughout the pay section, is expected to be 0.1 millidarcy or less.
- (B) The stabilized production rate, against atmospheric pressure, of wells completed for production in the formation, without stimulation, is not expected to exceed the production rate determined in accordance with the following table:

The maximum allowable production rate (in shannand rubic feet	per day) may not exceed—	4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
rrage depth to the top of the formation (in feet)	but does not	1, 1, 2, 2, 2, 4, 4, 5, 5, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6,	
If the average depait to the top of the formation (in feet)	exerds—	1,500 2,500	

[The next page is 14,241.]

(C) No well drilled into the recommended tight formation is expected to

developed by infill drilling prior to the date of determination and the (D) If the formation or any portion thereof was authorized to be produce, without stimulation, more than five barrels of crude oil per day.

jurisdictional agency shall not include such formation or portion thereof in its such formation or portion subject to infill drilling can be developed absent the incentive price established in paragraph (a) of this section then the jurisdictional agency has information which in its judgment indicates that

determination.

(3) Notice to the Commission. Any jurisdictional agency making a price established in paragraph (a) of this section is necessary to provide reasonable incentives for production of the natural gas from the determined showing that the formation exhibits low permeability characteristics and the (c)(2)(i)(A) of this section, if the jurisdictional agency makes an adequate (C) of this section, but does not meet the guideline contained in paragraph formation which meets the guidelines contained in paragraph (c)(2)(i)(B) and (ii) The jurisdictional agency may designate as a tight formation any formation due to the extraordinary costs associated with such production.

(4) Content of determinations. A determination that a formation provide timely notice in writing of the determination to the Commission. Such notice shall include substantiation provided in paragraph (4) of this section determination that a natural gas formation qualifies as a tight formation will and be in the manner prescribed in § 274.104 of this chapter.

qualifies as a designated tight formation shall contain the following

information:

(i) Geological and geographical descriptions of the formation which is determined to qualify as a tight formation;

(ii) Geological and engineering data to support the determination and the

(iii) A map which clearly locates wells which are currently producing source of that data;

(iv) A report of the extent to which existing State and Federal regulations from the determined tight formation or a list locating all wells which are currently producing natural gas from the determined tight formation;

disposal operations) that are or are expected to be used as a domestic or affect any fresh water aquifers (during both hydraulic fracturing and waste will assure development of the determined tight formation will not adversely

expected from use of such techniques and engineering and geological data to employing those techniques; and the degree of increase in production to be expected to be necessary and the estimated expenditures necessary for (v) If the formation is determined under paragraph (c)(2)(ii) of this section, the types and extent of enhanced production techniques which are agricultural water supply;

(vi) Any other information which the jurisdictional agency deems support that estimate; and

Federal Energy Regulatory Commission

\$ 271.703 \$ 24,173

Regulations

determination submitted in accordance with this section, the Commission will determination submitted in accordance with this section, the Commission will determination submitted in accordance. review the jurisdictional agency's determination in accordance with the procedures established in Part 275 of this chapter

and geological parameters of the designated tight formations is located in the commission's official file for Docket No. RM79-76, subindexed as indicated. as tight iormations. A more detailed description of the geographical extent (d) Designated tight formations. The following formations are designated

and is also located in the official files of the jurisdictional agency that

submitted the recommendation.

(1) The Cotton Valley Group in Texas. RM79.76 (Texas-1).

Counties, the western boundary is set by the Mexia-Talco fault zone through flexture, running through Sabine, San Augustine, Angelina and Trinity Louisiana border, the southern boundary is along the Angelina-Caldwell the eastern boundary is formed by the Texas-Arkansas border and the Texas-Oklahoma border extending through Fannin, Lamar, and Red River Counties; (i) The Cotton Valley Group consisting of the Cotton Valley Sandstone, the Bossier Shale and the Cotton Valley Lime Formations.—(A) Delineation of formation. The northern boundary of the Cotton Valley Group is the Texas-

encountered at 8,000 feet to the north, 11,400 feet to the east, 13,200 feet to feet to the south, and 5,340 feet to the west, the Cotton Valley Lime is Shale is encountered at 7,700 feet to the north, 10,720 feet to the east, 12,600 (B) Depth. The Cotton Valley Sandstone is encountered at an average depth of approximately 7,000 feet to the north, 8,000 feet to the east, between 10,000 and 11,000 feet to the south, and 5,000 feet to the west; the Bossier

(ii) The Cotton Valley Sandstone in the Paige, N.E. Field area. (A) Delineation of formation. The Cotton Valley Sandstone in the Paige, N.E. Field area is found in the eastern portion of Bastrop County, Texas, in Field area is found in the eastern portion of Bastrop County, Texas, in Field area is found in the eastern portion of Bastrop County, Texas, in Field area is found in the eastern portion of Bastrop County, Texas, in Field area is found in the eastern portion of Bastrop County, Texas, in Field area is found in the eastern portion of Bastrop County, Texas, in Field area is found in the eastern portion of Bastrop County, Texas, in Field area is found in the eastern portion of Bastrop County, Texas, in Field area is found in the eastern portion of Bastrop County, Texas, in Field area is found in the eastern portion of Bastrop County, Texas, in Field area is found in the eastern portion of Bastrop County, Texas, in Field area is found in the eastern portion of Bastrop County, Texas, in Field area is found in the eastern portion of Bastrop County, Texas, in Field area is found in the eastern portion of Bastrop County, Texas, in Field area is found in the eastern portion of Bastrop County, Texas, in Field area is found in the eastern portion of Field area. Sandstone are approximately 2.5 miles around the Hou-Tex Oil and Gas No. 1 O.R. Mitchell Well. This well is in the Paige, N.E. Field, located two miles

from Paige, Texas, in the Wm. Boatwright Survey, A-82.

and -12,780 feet, respectively. The maximum thickness of the formation is N.E. Field area are found at the approximate subsea depths of -11.520 feet (B) Depth. The top and base of the Cotton Valley Sandstone in the Paige,

(2) The Mancos "B" Formation in Colorado. RM79.76 (Colorado-2). approximately 1,790 feet.

straddles the Rio Blanco-Garfield county line from the Utah-Colorado state line east to the Douglas Pass and Baxter Pass Unit Area, underlying (i) Delineation of formation. The Mancos "B" Formation is located approximately midway between Grand Junction and Rangely, Colorado, and

Federal Energy Guidelines

1 24,173

## NEW MEXICO OIL CONSERVATION DIVISION

CASE 10432

January 9, 1992

EXHIBIT NO. 3

## TIGHT FORMATION AREA DESIGNATED NM - 25

## **CONTENTS**

Federal Register, Vol. 48 No. 119, June 20, 1983, pg. 28113-28114

N.M. Oil Conservation Division Order No. R-7200

Correspondence: USBLM to OCD, May 3, 1983

Correspondence: FERC to USBLM, March 28, 1984

FERC Final Ruling, Order No. 397 issued 9/21/84

the top of the Mancos "B" Formation is 3,000 feet. The Mancos "B' Formation ranges in thickness from 150 to 325 feet.

## III. Discussion of Recommendation

Colorado claims in its submission that evidence gathered through information and testimony presented at a public hearing in Cause No. NG-31 convened by Colorado on this matter demonstrates that:

(1) The average in situ gas permeability throughout the pay section of the proposed area is not expected to

exceed 0.1 millidarcy;

(2) The stabilized production rate, against atmospheric pressure, of wells completed for production from the recommended formation, without stimulation, is not expected to exceed the maximum allowable production rate set out in § 271.703(c)(2)(i)(B); and

(3) No well drilled into the recommended formation is expected to produce more than five (5) barrels of oil

per day.

Colorado further asserts that existing State and Federal Regulations assure that development of this formation will not adversely affect any fresh water aquifers.

Accordingly, pursuant to the authority delegated to the Director of the Office of Pipeline and Producer Regulation by Commission Order No. 97, issued in Docket No. RM80-68 (45 FR. 53456, August 12, 1980), notice is hereby given of the proposal submitted by Colorado that an additional area of the Mancos "B" Formation, as described and delineated in Colorado's recommendation as filed with the Commission, be designated as a tight formation pursuant to § 271.703.

## IV. Public Comment Procedures

Interested persons may comment on this proposed rulemaking by submitting written data, views or arguments to the Office of the Secretary, Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, D.C. 20426, on or before August 1, 1983. Erich person submitting a comment should indicate that the comment is being submitted in Docket No. RM79-76-233 (Colorado-27 Addition), and should give reasons including supporting data for any recommendations. Comments should include the name, title, mailing address, and telephone number of one person to whom communications concerning the proposal may be addressed. An original and 14 conformed copies should be filed with the Secretary of the Commission. Written comments will be available for public inspection at the Commission's Division of Public Information, Room

1000, 825 North Capitol Street, NE., Washington, D.C., during business

Any person wishing to present testimony, views data, or otherwise participate at a public hearing should notify the Commission in writing of the desire to make an oral presentation and therefore request a public hearing. Such request shall specify the amount of time requested at the hearing. Requests should be filed with the Secretary of the Commission no later than June 30, 1983.

## List of Subjects in 18 CFR Part 271

Natural gas, Incentive price, Tight formations.

(Natural Gas Policy Act of 1978, 15 U.S.C. 3301-3432)

Accordingly, the Commission proposes to amend the regulations in Part 271, Subchapter H. Chapter I. Title 18. Code of Federal Regulations, as set forth below, in the event Colorado's recommendation is adopted.

## Kenneth A. Williams,

Director, Office of Pipeline and Producer Regulation.

## PART 271—[AMENDED]

Section 271.703 is amended by revising paragraph (d)(112) to read as follows:

## § 271.703 Tight formations.

(d) Designated tight formations.

(112) Mancos "B" Formation in Colorado. RM79-76-126 (Colorado-27).

(i) Delineation of formation. The Mancos "B" Formation is located in the Douglas Creek Arch: area of western Colorado, in Rio Blanco County. The Mancos "B" Formation underlies Township 1 North, Range 101 West, Sections 17 through 20 and 29 through 32: Township 1 North, Range 102 West, Sections 7 through 9 and 13 through 36; Townships 1 North and South, Range 103 West, All Sections; Townships 1 North and South, Range 104 West, Sections 1 through 3, 10 through 15, 22 through 27, and 34 through 36; Township 1 South Range 102 West, Sections 1 through 10: 18 through 21, and 28 through 33; Township 2 South, Range 102 West, Sections 4 through 6, N 1/2 of Section 8, N 1/2, SE 1/4 of Section 9: Township 2 South, Range 103 West, Sections 1 through 6, 17, 18, 20, 29, 32, and 33; and Township 2 South Range 104 West, Sections 1 through 3 and 10 through 15.

(ii) Depth. The Mancos "B" Formation ranges in thickness from 150 to 325 feet.

The average depth to the top of the Mancos "B" Formation is 3,000 feet.

IFR Doc. 83-16436 Filed 6-17-83: 8:45 aml BILLING CODE 6717-01-M

## 18 CFR Part 271

[Docket No. RM79-76-204; New Mexico-25]

**High-Cost Gas Produced From Tight** Formations; New Mexico

**AGENCY: Federal Energy Regulatory** Commission, DOE.

ACTION: Notice of Proposed Rulemaking.

**SUMMARY:** The Federal Energy Regulatory Commission is authorized by section 107(c)(5) of the Natural Gas Policy Act of 1978 to designate certain types of natural gas as high-cost gas where the Commission determines that the gas is produced under conditions which present extraordinary risks or costs. Under section 107(c)(5), the Commission issued a final regulation designating natural gas produced from tight formations as high-cost gas which may receive an incentive price (18 CFR 271.703). This rule established procedures for jurisdictional agencies to submit to the Commission recommendations of areas for designation as tight formations. This Notice of Proposed Rulemaking by the Director of the Office of Pipeline and Producer Regulation contains the recommendation of the State of New Mexico that the Pictured Cliffs Formation be designated as a tight formation under § 271.703(d).

DATE: Comments on the proposed rule are due on August 1, 1983.

Public Hearing: No public hearing is scheduled in this docket as yet. Written requests for a public hearing are due on June 30, 1983.

ADDRESS: Comments and requests for hearing must be filed with the Office of the Secretary. 825 North Capitol Street, NE., Washington, D.C. 20426.

FOR FURTHER INFORMATION CONTACT: Leslie Lawner, (202) 357-8511, or Victor Zabel, (202) 357-8616.

## SUPPLEMENTARY INFORMATION:

In the matter of: High-Cost Gas Produced from Tight Formations; Docket No. RM79-76-204 (New Mexico-35).

17 in.

Issued Jane 15, 1983.

## I. Background

On May 20, 1983, the State of New Mexico Energy and Minerals Department, Oil Conservation Division (New Mexico) submitted to the Commission a recommendation, in accordance with § 271,703 of the

Commission's regulations (45 FR 56034, August 22, 1980), that the Pictured Cliffs Formation located in Rio Arriba and Sandoval Counties, New Mexico, be designated as a tight formation. Pursuant to § 271.700(c)(4) of the regulations this Notice of Proposed Rulemaking is hereby issued to determine whether New Mexico's recommendation that the Pictured Cliffs Formation he designated a tight I tanation should be adopted. The United States Department of the Interior, Bareau of Land Management HH.M) concurs in part with New Meson ar abmmendation, is no nor ending that pertain areas be actuded and other areas be deleted. New Mexico's recommendation and supporting data are on file with the Commission and are available for public inspection.

### **II.** Description of Recommendation

The recommended area is located in the southeastern portion of the San Juan Basin in Ric Arriba and Sandoval Pointure, New Mexico. The recommended formation underlies approximately 204,240 acres and is approximately 95 feet in thickness. The average depth to the top of the Pictured Cliffs Formation is 2.685 feet.

### (I). Discussion of Recommendation

New Mexico claims in its submission that evidence gathered through information and testimony presented at a public hearing in Case No. 7746 convened by New Mexico on this matter demonstrates that:

- (1) The average in situ gas permeability throughout the pay section of the proposed area is not expected to exceed 0.1 millidates.
- (2) The stabilized production rate, against atmospheric pressure, of wells completed for production from the recommended formation, without stimulation, is not expected to exceed the maximum allowable production rate set out in § 271.703(c)(2)(i)(B); and
- (3) No well drilled into the recommended formation is expected to produce more than five (5) barrels of oil per day.

New Mexico further asserts that existing State and Federal Regulations assure that development of this constraint will not noversely affect any fresh water aquifers.

BLM claims that the recommended formation underlying Township 24 North, Range 3 West, Sections 26 through 35 and the S/2 of Section 36, adjacent to the northeastern boundary

of New Mexico's proposed area, is within the geologic boundaries of the formation and should be included in the recommended area.

BLM further recommends that the portion of the Pictured Cliffs Formation underlying Township 22 North. Range 5 West, All Sections: Township 22 North. Range 4 West, Sections 13 through 36; Township 22 North, Range 3 West, Sections 19 through 36, located in the southwest corner of New Mexico's proposed area should be excluded from tight formation designation. BLM asserts that this area is not part of the same producing trend as the rest of the recommended formation and has not been adequately tested, described, or characterized by the applicant's data to warrant inclusion in the recommended

Accordingly, pursuant to the authority delegated to the Director of the Office of Pipeline and Producer Regulation by Commission Order No. 97. issued in Docket No. RM80–68 (45 FR 53456, August 12, 1980), notice is hereby given of the proposal submitted by New Mexico that the Pictured Cliffs Formation, as described and delineated in New Mexico's recommendation as filed with the Commission, be designated as a tight formation pursuant to § 271.703.

### IV. Public Comment Procedures

Interested persons may comment on this proposed rulemaking by submitting written data, views or arguments to the Office of the Secretary, Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, D.C. 20426, on or before August 1, 1983, Each person submitting a comment should indicate that the comment is being submitted in Docket No. RM79-76-204 (New Mexico-25), and should give reasons including supporting data for any recommendations. Comments should include the name, title, mailing address, and telephone number of one person to whom communications concerning the proposal may be addressed. An original and 14 conformed copies should be filed with the Secretary of the Commission. Written comments will be available for public inspection at the Commission's Division of Public Information, Rosen 1030, 825 North Capitol Street, ME., Washington, D.C., during business

Anv person wishing to present testimony, views, data, or otherwise participate at a public hearing should notify the Commission in writing of the

desire to make an oral presentation and therefore request a public hearing. Such request shall specify the amount of time requested at the hearing. Requests should be filed with the Secretary of the Commission no later than June 30, 1983.

### List of Subjects in 18 CFR Part 271

Natural gas, Incentive price, Tight formations.

(Natural Gas Policy Act of 1978, 15 U.S.C. 3301-3432)

Accordingly, the Commission proposes to amend the regulations in Part 271, Subchapter H. Chapter I. Title 18. Code of Federal Regulations, as set forth below, in the event New Mexico's recommendation is adopted.

### Kenneth A. Williams,

Director, Office of Pipeline and Producer Regulation.

### PART 271-[AMENDED]

Section 271.703 is amended by adding paragraph (d)(193) to read as follows:

§ 271,703 Tight formations.

(d) Designated tight formations.

(135) through (192) [RESERVED] (193) Pictured Cliffs Formation in New Mexico, RM79-76-204 (New Mexico-25).

- (i) Delineation of formation. The Pictured Cliffs Formation is located in Rio Arriba and Sandoval Counties, New Mexico, in Township 22 North, Ranges 2, 3, 4, and 5 West, All Sections; Township 23 North, Range 2 West, Sections 5 through 9, 18 through 21, and 25 through 36; Township 23 North, Ranges 3, 4, and 5 West, All Sections; Township 24 North, Range 3 West, Section 19, 20, 26 through 35, and S/2 of 38; Township 24 North, Range 4 West, Sections 3 through 10 and 13 through 36; Township 24 North, Range 5 West, All Sections; Township 25 North, Range 4 West, Sections S/2 of 30, 31, and 32; Township 25 North, Range 5 West, Sections 15 through 23, S/2 of 24, and 25 through 36. NMPM.
- (ii) Depth. The Pictured Cliffs
  Pornation is defined as that interval at
  a 1, 5th of approximately 3,346 feet to
  3,111 feet on the Induction Electric Log
  from the John E. Schalk, Cinco Diablos
  Well No. 6. The average depth to the top
  of the Pictured Cliffs Formation is 2,885
  feet

IFR Duc. 03-10429 Filed 6-17-33: 8:45 aml

BILLING CODE 8717-01-M

### STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

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

CASE NO. 7746 Order No. R-7200

APPLICATION OF FOUR CORNERS GAS PRODUCERS ASSOCIATION FOR DESIGNATION OF A TIGHT FORMATION, RIO ARRIBA AND SANDOVAL COUNTIES, NEW MEXICO.

### ORDER OF THE DIVISION

### BY THE DIVISION:

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This cause came on for hearing at 9 a.m. on November 23, 1982, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this <u>3rd</u> day of February, 1983, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

### FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Four Corners Gas Producers Association, requests that the Division in accordance with Section 107 of the Natural Gas Policy Act, and 18 C.F.R. \$271.703 recommend to the Federal Energy Regulatory Commission that the Pictured Cliffs formation underlying those lands situated in Rio Arriba and Sandoval Counties, New Mexico, described on "Exhibit A" attached to this order and hereinafter referred to as the Pictured Cliffs formation, be designated as a tight formation in said Federal Energy Regulatory Commission's regulations.
- (3) That the Pictured Cliffs formation underlies all of the above-described lands; that the formation consists of marine siltstone, clay-filled deposits about 95 feet thick, consisting of near shore bars which are lenticular, ribbonlike deposits with limited areal extent; that better permeability is encountered on the crests of these near shore bars

-2-Case No. 7746 Order No. R-7200

where the sands are better developed than the areas off the bar crests where the sands become siltier and more clayfilled; and that the top of such formations is found at an average depth of 2685 feet below the surface of the area set forth in "Exhibit A" attached to this order.

- (4) That the type section for the Pictured Cliffs formation for the proposed tight formation designation is found at a depth of approximately 3046 feet to 3141 feet on the Induction Electric Log from the John E. Schalk, Cinco Diablos Well No. 6 located in Unit D of Section 14, Township 23 North, Range 4 West, Rio Arriba County, New Mexico.
- (5) That the area for which a tight formation designation is sought is comprised of approximately 1464 proration units on which 466 Pictured Cliffs wells have been drilled of which 94 have been abandoned.
- (6) That with less than one-third of the available gas spacing units being developed, the area proposed for designation may be characterized as one of low to moderate development.
- (7) That approximately 60 gas wells have been completed in the proposed area since February 20, 1980, the date of promulgation of interim FERC rules on high-cost natural gas produced from tight formations.
- (8) That at the average depth for the Pictured Cliffs formation in the proposed area, the maximum qualifying unstimulated production rate is 79 MCFD.
- (9) That unstimulated natural production rates were available from seven producible wells completed after February 20, 1980.
- (10) That one well had an unstimulated potential of 259 MCFD while the remainder averaged 16.5 MCFD.
- (11) That core analyses were available on nine wells, two of which were drilled after February 20, 1980, within the proposed area.
- (12) That one cored well was a dry hole and that data should not be used in determining average in situ permeability.
- (13) That one well exhibited average laboratory permeability of 2.64 millidarcies.

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- (14) That the remaining core derived in <u>situ</u> permeability averaged 0.011 millidarcies.
- (15) That based on an analysis of available data from existing wells within the proposed area and utilizing generally and customarily accepted petroleum engineering techniques and measurements:
  - (a) the estimated average <u>in situ</u> gas permeability throughout the pay section of the Pictured Cliffs formation is expected to be 0.1 millidarcy or less; and
  - (b) the stabilized production rate, against atmospheric pressure of wells completed for production in the Pictured Cliffs formation, without stimulation, is not expected to exceed production levels determined by reference to well depth, as found in the table set out in 18 C.F.R. §271.703 (2) (B) of the regulations; and
  - (c) no well drilled into the Pictured Cliffs formation is expected to produce, without stimulation, more than five barrels of crude oil per day.
- (16) That within the proposed area there is a recognized aquifer being the Cjo Alamo, located over 200 feet above the Pictured Cliffs formation.
- (17) That existing State of New Mexico and Federal Regulations relating to casing and cementing of wells will assure that development of the Pictured Cliffs formation will not adversely affect the said aquifer.
- (18) That the Pictured Cliffs formation should be recommended to the Federal Energy Regulatory Commission for designation as a tight formation.

### IT IS THEREFORE ORDERED:

(1) That it be and hereby is recommended to the Federal Energy Regulatory Commission pursuant to Section 107 of the Natural Gas Policy Act of 1978, and 18 C.F.R. §271.703 of the regulations that the Pictured Cliffs formation underlying those lands in Rio Arriba and Sandoval Counties, New Mexico, as described on "Exhibit A" attached to this order, be designated as a tight formation.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO QIL CONSERVATION DIVISION

KU XX VIII

JOE D. RAMEY Director

SEAL

Four Corners Gas Producers Association Five Lakes Canyon Tight Formation Area Rio Arriba and Sandoval Counties, New Mexico

TOWNSHIP 22 NORTH, RANGE 2 WEST, NMPM Sections 1 through 36: All

TOWNSHIP 22 NORTH, RANGE 3 WEST, NMPM Sections 1 through 36: All

TOWNSHIP 22 NORTH, RANGE 4 WEST, NMPM Sections 1 through 36: All

TOWNSHIP 22 NORTH, RANGE 5 WEST, NMPM Sections 1 through 36: All

TOWNSHIP 23 NORTH, RANGE 2 WEST, NMPM Sections 5 through 9: All Sections 16 through 21: All Sections 25 through 36: All

TOWNSHIP 23 NORTH, RANGE 3 WEST, NMPM Sections 1 through 36: All

TOWNSHIP 23 NORTH, RANGE 4 WEST, NMPM Sections 1 through 36: All

TOWNSHIP 23 NORTH, RANGE 5 WEST, NMPM Sections 1 through 36: All

TOWNSHIP 24 NORTH, RANGE 3 WEST, NMPM Sections 19 and 20: All Sections 29 through 32: All Section 33: W/2

TOWNSHIP 24 NORTH, RANGE 4 WEST, NMPM Sections 3 through 10: All Sections 13 through 36: All

TOWNSHIP 24 NORTH, RANGE 5 WEST, NMPM Sections 1 through 36: All

TOWNSHIP 25 NORTH, RANGE 4 WEST, NMPM Section 30: S/2 Sections 31 and 32: All

TOWNSHIP 25 NORTH, RANGE 5 WEST, NMPM Sections 15 through 23: All Section 24: S/2 Sections 25 through 36: All

Containing a total of 234,240 acres, more or less.

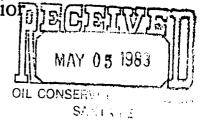
Exhibit A Order No. R-7200

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### United States Department of the Interior

BUREAU OF LAND MANAGEMENT 505 Marquette Avenue, NW, Suite 815 Albuquerque, New Mexico 87102



MAY 03 1083

Mr. W. Perry Pearce Oil Conservation Division State of New Mexico P. O. Box 2088 Santa Fe, New Mexico 87501

Dear Mr. Pearce:

This jurisdictional agency concurs in part, in the recommendation of the State of New Mexico, Case No. 7746, Order No. R-7200, dated February 3, 1983, that the Pictured Cliffs formation underlying the described lands in subject order in Rio Arriba and Sandoval Counties, New Mexico, be designated as a Section 107 tight formation.

We recommend that certain areas be included and other areas be deleted as outlined in the following paragraphs.

According to Mr. McCord's testimony, the boundaries of the Five Lakes Canyon Tight Gas Area are based on acreage position, not on engineering or geologic parameters. However, earlier in his testimony Mr. McCord does refer to boundaries. He describes the northeast edge as bounded by the extensively developed South Blanco Pictured Cliffs field. This boundary is reasonable except where parts of the Lindrith Federal Unit are excluded. It is recommended that sections 26-35 and  $S^{1/2}$  section 36, T. 24 N., R. 3 W., be included in the tight gas area. The Federal interest would not be served by arbitrarily excluding Federal units.

Mr. McCord describes the Pictured Cliffs as "nearshore bars aligned north-west-southeast" and also says that the "nearshore bars within the proposed area are extremely lenticular, ribbon-like deposits with a very limited southwest-northeast areal extent." In view of this limited areal extent, it is unreasonable to include virtually untested areas which are several miles southwest from the edge of the main trend.

The applicant did not supply us with isopach maps or other information which would delineate the natural edge of the Ballard Pictured Cliffs field. However, electric logs of wells drilled through the Pictured Cliffs south of the developed portion of the field were studied in section 19, T. 22 N., R. 2 W., section 16, T. 22 N., R. 3 W.(A'), section 8, T. 22 N., R. 4 W., section 1, T. 22 N., R. 5 W., section 36, T. 23 N., R. 5 W., and section 35, T. 23 N., R. 6 W. The Pictured Cliffs in these wells appears to be poorly developed, containing a greater proportion of clay and having higher water

saturations than wells along the main trend of the field. Further southwest of this line of wells the sands are again better developed indicating another set of nearshore bars.

Although the Pictured Cliffs sands may be tight in the southwest corner of the proposed area, our data suggests that it is not part of the same trend as the Ballard Pictured Cliffs. As such, these sands have not been adequately tested, described or characterized by the data presented by the applicant. Therefore, we disagree with that portion of the State order which defines the boundaries and recommend that the following lands not be included in the proposed tight gas sands area:

- T. 22 N., R. 5 W., all
- T. 22 N., R. 4 W., sections 13-36
- T. 22 N., R. 3 W., sections 19-36

This results in a southwestern boundary which more closely approximates the trend of the deposit.

It is requested that this concurrence and recommendation be included with the package submitted to the Federal Energy Regulatory Commission.

Sincerely yours,

James W. Shelton

Assistant District Manager

for Minerals

In order to accurately present this matter to the Commission for decision, the Bureau of Land Management's current position regarding the above described acreage is requested.

Very truly yours,

Howard Kilchrist, Director Division of Producer Audits and Pricing

### Enclosure

cc: W. Perry Pearce
Legal Counsel to the Oil
Conservation Division
Department of Energy and Minerals
P.O. Box 2088
Santa Fe, New Mexico 87501

William F. Carr Campbell, Byrd, & Black P.A. Jefferson Place Santa Fe, New Mexico 87501

Ernest L. Padilla P.O. Box 2523 Santa Fe, New Mexico 87501

Jeffrey E. Jackson Attorney at Law P.O. Box 3249, Terminal Annex Los Angeles, California 90051

John H. Belson Regulatory Affairs P.O. Box 3249, Terminal Annex Los Angeles, California 90051

J.S. Charles, Vice President Regulatory Affairs Northwest Pipeline Corporation P.O. Box 1526 Salt Lake City, Utah 84110

Mary Duffin, Esquire Northwest Pipeline Corporation P.O. Box 1526 Salt Lake City, Utah 84110

Kim M. Clark, Esquire Akin, Gump, Strauss, Hauer & Feld 1333 New Hampshire Avenue, N.W. Suite 400 Washington, D.C. 20036

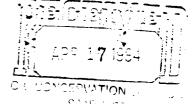
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### United States Department of the Interior

### BUREAU OF LAND MANAGEMENT ALBUQUERQUE DISTRICT OFFICE

505 Marquette, N.W. P.O. Box 6770 Albuquerque, New Mexico 87197-6770



April 16, 1984

Mr. Howard Kilchrist
Director
Division of Producer Audits and Pricing
Federal Energy Regulatory Commission
825 North Capitol Street
Washington, DC 20426

Dear Mr. Kilchrist:

This letter is in reply to your inquiry of March 28, 1984, regarding Docket No. RM79-76-204, New Mexico-25, designation of Pictured Cliffs Formation in Rio Arriba and Sandoval Counties as a tight formation under the Natural Gas Policy Act of 1978.

We have reviewed the application of the Four Corners Gas Producers Association and this jurisdictional agency reaffirms its original recommendation that the area in question be deleted. Well-log correlations show that there are geologic limits to the Ballard and South Blanco Pictured Cliffs fields; the test data which describe these pools are not valid beyond the limits of the pools. Therefore, all of township T. 22 N., R. 5 W., sections 13-36, T. 22 N., R. 4 W., and sections 19-36, T. 22 N., R. 5 W., have not been adequately tested, described or characterized by the data presented by the applicant because they lie beyond the limits of either of these pools. The data presented do not prove this area to be tight. This area should not be included in the tight sands area until data is submitted which specifically tests this area and proves that it meets the requirements for a tight formation.

Sincerely yours,

For District Manager

cc:

NM Oil Conservation Division P.O. Box 2088 Santa Fe, NM 87501

Mr. William F. Carr Campbell, Byrd & Black, PA P.O. Box 2208 Santa Fe, NM 87501

Ms. Mary Duffin, Esquire Northwest Pipeline Corporation P.O. Box 1526 Salt Lake City, UT 84110 James W. Shelton Assistant District Manager for Minerals United States Department of the Interior Bureau of Land Management 505 Marquette Avenue, N.W., Suite 815 Albuquerque, New Mexico 87102

In Re: Docket No. RM79-76-204

(New Mexico-25)

Pictured Cliffs Formation

Rio Arriba and Sandoval Counties

Dear Mr. Shelton:

On May 20, 1983, the Commission received the recommendation by the State of New Mexico, Energy and Minerals Department, Oil Conservation Division (New Mexico), that the Pictured Cliffs Formation located in portions of Rio Arriba and Sandoval Counties, New Mexico, be designated as a tight formation. A Notice of Proposed Rulemaking concerning the recommendation was issued on June 15, 1983, and established a comment period ending July 30, 1983.

Included as part of New Mexico's recommendation is your letter of May 3, 1983, which concurred in part with the recommendation. Your letter additionally recommended that certain areas be included and others be deleted as discussed below.

With respect to areas which you recommend be added you indicate that certain Federal units appeared to be arbitrarily excluded based on acreage position. However, based on geologic parameters you believe these areas should be included. Our review of the data also indicates that Sections 26 through 28, E 1/2 of Section 33, Sections 34 and 35, and the S 1/2 of Section 36, Township 24 North, Range 3 West meet the geologic criteria and should be included in the area for consideration. The inclusion of this acreage is reflected in the Notice of Proposed Rulemaking issued on June 15, 1983.

With respect to the area which you indicate should be deleted your letter states that "although the Pictured Cliffs sands may be tight in the southwest corner of the proposed area, our data suggests that it is not part of the same trend as the Ballard Pictured Cliffs." The Commission's guidelines in this regard require only that the area being recommended exhibit tight formation characteristics as defined in the regulations. These guidelines would not necessarily require that the designated area be in the same geologic trend.

The comment period with respect to this formation ended on July 31, 1983. One comment opposed to New Mexico's recommendation was timely filed by Northwest Pipeline Corporation and one comment opposed to New Mexico's recommendation was untimely filed by Southern California Gas Company and Pacific Lighting Gas Supply Company (copies attached). We have requested that Northwest furnish the data referred to in its comments.

In light of your recommendation as well as the comments of Northwest Pipeline Corporation, Southern California Gas Company, and Pacific Lighting Gas Supply Company, we will continue to weigh the data submitted by New Mexico to the extent that it indicates that the whole of the proposed area meets the Commission's guidelines for designation as a tight formation.

Should you have additional evidence or comments regarding the exclusion of the southwest portion of the recommended area we would be most happy to consider them. Thank you for your cooperation.

Very truly yours,

Howard Kilchrist, Director Division of Producer Audits and Pricing

### Attachments (2)

cc: W. Perry Pearce
Legal Counsel to the Oil
Conservation Division
Department of Energy and Minerals
P.O. Box 2088
Santa Fe, New Mexico 87501

William F. Carr Campbell, Byrd, & Black P.A. Jefferson Place Santa Fe. New Mexico 87501

Ernest L. Padilla P.O. Box 2523 Santa Fe, New Mexico 87501

Jeffrey E. Jackson Attorney at Law P.O. Box 3249, Terminal Annex Los Angeles, California 90051 cc: John H. Belson
Regulatory Affairs
P.O. Box 3249, Terminal Annex
Los Angeles, California 90051

J.S. Charles, Vice President Regulatory Affairs Northwest Pipeline Corporation P.O. Box 1526 Salt Lake City, Utah 84110

Mary Duffin, Esquire Northwest Pipeline Corporation P.O. Box 1526 Salt Lake City, Utah 84110

Kim M. Clark, Esquire Akin, Gump, Strauss, Hauer & Feld 1333 New Hampshire Avenue, N.W. Suite 400 Washington, D.C. 20036

### 18 C.F.R. Part 271

High-Cost Gas Produced from Tight Formations; Final Rule

Docket No. RM79-76-204 (New Mexico - 25)

ORDER NO. 397

(Issued September 21, 1984)

Federal Energy Regulatory Commission

Final rule

issued a rule designating natural gas produced from tight formations as high-cost gas. Jurisdictional agencies may submit recommendations of areas for designation as tight formations. Here the Commission adopts the recommendation by the New Mexico Energy and Minerals Department, and the U. S. Hureau of Land Management that a portion of the Pictured Cliffs Formation located in Rio Arriba and Sandoval Counties, New Mexico, be designated as a tight formation. SUMMARY: Under Section 107(c)(5) of the Natural Gas Policy Act of 1978, the Federal Energy Regulatory Commission designates certain types of natural gas as high-cost gas. High-cost gas is produced under conditions which present extraordinary tisks or costs and once designated may receive an dinary tisks or costs and once designated may receive incentive price. Under section 107(c)(5), the Commission

EFFECTIVE DATE: This rule is effective october 22, 1984.

FOR FURTHER INFORMATION CONTACT: Kevin: 357-5420 or Walter Lawson, (202) 357-8556. Kevin R. Rees, (202)

# UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Raymond J. O'Connor, Chairman; Georgiana Sheldon, A. G. Sousa, Oliver G. Richard [1] and Charles G. Stalon.

High-Cost Gas Produced from Tight Formations Docket No.RM79-76-204 (New Mexico - 25)

ORDER NO. 397

FINAL RULE

(Issued September 21, 1984)

### BACKGROUND

a portion of the Pictured Cliffs Formation located in Rio designation on June 15, 1984. 2/of the Office of Pipeline and Producer Regulation (Director) tight formation eligible for incentive pricing. Arriba and Sandoval Counties, New Mexico, as a designated Mexico), the Commission amends its regulations  $\underline{\mathbf{I}}/$  to designate and Minerals Department, Oil Conservation Division (New issued a Notice of Proposed Rulemaking proposing the Based on a recommendation made by the New Mexico Energy The Director

ŗ 18 C.F.R. § 271.703(d) (1983).

48 Fed. Reg. 28,113 (June 20, 1983).

DC-C-13

The U. S. Department of Interior, Bureau of Land Management (HLM), 3/ supports the New Mexico recommendation in part, but argues that certain other areas should be included in the recommendation and that others be deleted. BLM recommends that the part of the Pictured Cliffs Formation underlying Township 24 North, Range 3 West, Sections 26 through 35 and South 1/2 of Section 36, be included in the tight formation designation (Sections 29 through 32 and the West 1/2 of Section 33 were included in the New Mexico recommendation).

However, BLM also recommends that the portion of the pictured Cliffs Formation underlying Township 22 North, Range 3 West, Sections 19 through 36; Township 22 North, Range 4 West, sections 13 through 36; and Township 22 North, Range 5 West, all sections, be deleted from the tight formation designation. BLM asserts that this portion, located in the southwest corner of New Mexico's proposed area, is not part of the same trend found in the Ballard Pictured Cliffs field and has not been adequately tested, described or characterized by the data contained in the application.

BLM describes the portion of the Pictured Cliffs Formation it supports as being nearshore bars aligned northwest to southeast, whereas the area it opposes is described as nearshore

bars which are extremely lenticular, ribbon-like deposits with a very limited southwest-northeast areal extent. BLM asserts that because of the limited areal extent of the deposits, it is unreasonable to include the untested acreage found several miles southwest from the edge of the main trend.

# . SUMMARY OF COMMENTS

Several comments were received in response to the Notice of Proposed Rulemaking. Southern California Gas Supply Company (SoCal) and the Pacific Lighting and Gas Supply Company (PLGS) filed joint comments opposing the New Mexico recommendation. The Northwest Pipeline Corporation (Northwest) also filed comments opposing New Mexico's recommendation.

evaluate an area of nearly 370 square miles. constitute sufficient and adequate reservoir data to properly than the core method, flow rate data from only six wells were from only four wells. at the expected mended area qualified as a tight formation. SoCal and PLGS 3 available for the analysis. SoCal and PLGS feet this does not equation to estimate the recommended area's permeability rather this applicant chose to rely more on an analysis using Darcy's assert that the applicant before New Mexico attempted to arrive an inadequate analysis to support its assertion that the recomthe grounds that there was insufficient well test data and SoCal and PLGS objected to the recommendation by New Mexico in situ permeability based on core analyses SoCal and PLGS argue turther that while

<sup>3/</sup> Portions of the land involved herein are Federal lands and therefore the HLM was involved in the proceeding.

mining the average in situ permeability under the regulations submit enough supporting data to justify the exclusion measure. SoCal and PLGS assert that the applicant did rates from two wells whose production rate was too small to spot uncharacteristic of the recommended formation, yet included the particular well had penetrated a highly productive sweet from one of the seven wells because the applicant believed that assert that the applicant excluded the unstimulated flow rate all productive wells in the recommended area. SoCal and PLGS SoCal and PLGS state that the analytical approach for deteran erroneously low expected average in situ permeability. is to calculate the arithmetic average of the permeabilities of certain unfavorable data from its calculations, resulting SoCal and PLGS also argue that the applicant excluded not

the unstimulated flow rate for all productive wells of 51.2 Mcf when this figure is used, along with the arithmetic average of PLGS state that they have summarized the core data and have arrived radius and near wellbore damage of individual wells. Socal and thickness, static and flowing bottom hole pressures, wellbore because it does not reflect localized differences in net pay homogeneous formation such as the Pictured Cliffs formation, pay thickness of 41 feet is inappropriate for such a non-SoCal and PLGS assert that the applicant's use of an average average pay thickness of 23 feet. SoCal and PLGS assert that

> in § 271.703(c)(2)(i)(A). 0.24 millidarcy, exceeding the 0.1 millidarcy guideline found per day, it arrives at an estimated in situ permeability of

from New Mexico Order Nos. 156 and 577 respectively. 4/ Commission received the additional data from Northwest. Northwest felt was pertinent. On October 12, 1983, the Northwest had concerning these areas and any permeability data Cliffs and Ballard Pictured Cliffs Pools as established by bility levels of the acreage found in the South Blanco Pictured Northwest expressed concern about the development and permea-August 31, 1983, the Commission requested any additional data Northwest Pipeline Corporation (Northwest) in which August 1, 1983, the Commission also received comments

per section in these pools. Northwest submits of the 65 sections are 9% of the remaining sections are 75% developed, 4% of these developed. In the Ballard Pictured Cliffs Pool, containing sections contained in the Blanco Pictured Cliffs Pool, 29% are R-1670, issued May 23, 1960, allows the drilling of tour wells 103 sections, there is 100% development on 46% of the sections, 100% developed, 15% are 75% developed and 37% are partially Northwest submits that New Mexico Spacing Order No. 66% developed, and 22% of the sections are 50%

<sup>\*</sup> New May Mexico Order Nos. 156 and 577 were issued on 20, 1952, and on February 9, 1955 respectively.

calculates the permeability of the recommended formation, based and of 6 wells in the Ballard Pictured Cliffs Pool. Northwest history from 19 wells in the South Blanco Pictured Cliffs Pool on its review, to be an average of 0.113 millidarcy. Northwest also submits that it has reviewed production

### III. DISCUSSION

# BLM's Recommendation

mended area is supported by the evidence submitted. The Commission therefore includes this area in the area designated the additional area that HLM proposes to include in the recoma tight formation. The Commission has reviewed BLM's comments and finds that

a salty sandstone with clay tilled pore spaces, was deposited interfingered sand lenses recognizable on electric the proposed area to be a continuous lithologic unit of wells throughout the Review of the data shows the Pictured Cliffs Formation in that certain areas recommended by New Mexico should be deleted The Commission, however, disagrees with BLM's assertions recommended area. The subject formation,

> underlie the sparsely drilled southwestern portion. teristics in the adjacent nearshore bar system believed to originates, can reasonably be used to approximate the characin the northeastern portion, from which most of the raw data formation characteristics in the developed nearshore bar trend portion of the proposed area. Consequently, we believe that shore bars found near the northeast boundary were operating The same physical forces responsible for depositing the nearduring the deposition of the nearshore bars in the southwest in a regressive marine environment by the Late Cretaceous sea

expected to exhibit light formation characteristics. enough evidence exists to lead to a finding that this area is not be The Commission believes that the southwestern portion should most needed, could never be designated as tight tormations. so, then undeveloped areas, for which the incentive price is the northeast portion of the recommended area. If this were exist in the same degree in all parts of the tormation as in area exhibit or be expected to exhibit tight formation charac-The Commission's guidelines require that a recommended deleted from the tight formation designation, since They do not go so far as to require that data

# Socal and PLGC's Comments.

that the flow rates from the "sweet spot" were anomolous to the unpersuasive. The Commission also finds SoCal and PLGS's comments Commission review of the data submitted indicates

rate of flow. Additionally, the Commission used its estimate \$ 271.703(c)(2)(1)(A). which is well below the 0.1 millidarcy requirement found in of a net pay section of 41 feet in Darcy's equation and arrived of the unstimulated flow rate and the applicant's estimation subject formation, a figure above SoCal and PLGS' estimated to show a stabilized prestimulated flow rate of 79.5 Mcf for the section of the Commission's regulations requires the applicant with the guidelines in § 271.703(c)(2)(i)(8). Furthermore, that was actually an unstabilized rate of flow and not in accordance tlow rate of 16.5 Mcf. The Commission finds that SoCal and arrived at an arithmetic average for the unstimulated stabilized ding the flow rate from the sweet spot area, the Commission trom nine wells producing in the subject cross section, exclu section approximation of 41 feet for the net pay thickness of the rest of the recommended area and finds that exclusion of the in expected average in <u>situ</u> permeability of .018 millidarcy, rate from the "sweet spot" is justified in this particular assertion that the unstimulated flow rate was 51.2 Mcf Furthermore, the Commission believes that the applicant's is supported by the evidence available. Based on data pay

# Northwest's Comments

We now turn to Northwest's comments that certain areas have been substantially developed and should be deleted from

above, the Commission estimates the expected in situ permeaorder and so there is no basis to exclude any areas under bility to be .018 millidarcy for the designated area. will probably not quality for Accordingly, production from these wells in the tight formation the date at which the incentive price was established. Cliffs and South Blanco Pictured Cliffs Pools were drilled \$ 271.703(c)(2)(i)(D). of the recommendation, and information exists to indicate that and completed in the right formation prior to July 16, 1979, was issued. 5/ In this case, there has been no intill drilling substantially developed at the time an infill dillling order found this "information" to exist in cases where the area was the area can be developed absent the authorized to be developed by infill drilling prior to the date area should be included in a recommendation if that area was this designation. Section 271.703(c)(2)(1)(0) provides that no percent of the existing wells in the Hallard Pictured See § 271.703(b)(2) and (3). Furthermore, as stated Additionally, our review shows that the NGPA section 107 incentive incentive price. We have

<sup>5/</sup> See Docket No. RM79-76, (Colorado-1) FERC Stats. 6 Regs. Reg. Preambles 1977-1981 § 30,228 (1981), order 124; Docket No. RM79-76, (Colorado-PERC Stats. 6 Regs. [Reg. Preambles 1977-1981] ¶ 1, '44 (1981), order 137; Commission Order Denying Reherring, order 137-A, 15 FERC ¶ 61,277 (1981).

### ١٧. CONCLUSION

Clifts formation meets the guidelines contained in § 271,703(c)(2). Thus, the Commission adopts the New Mexico recommendation, with the additional area recommended by BLM. submitted by New Mexico supports the assertion that the Pictured Hased on the above, the Commission finds that the evidence

This amendment shall become effective October 22, 1984.

## 1.151 of Subjects in 18 C.F.R. Part 271:

Natural gas, Incentive price, Tight formations.

In consideration of the toregoing, Part 271 of Sub-

chapter H, Chapter I, Code of Federal Regulations, is amended as set forth below.

By the Commission

( S E A L )

Semist F. Rand

Kenneth F. Plumb Secretary.

Docket No. RM79-76-204

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Section 271.703 is amended to read as follows:

- 1. The authority citation for Part 271 reads as follows:
- Authority: Department of Energy Organization Act, 42 U.S.C. \$§ 7101 et seq.; Natural Gas Policy Act of 1978, 15 U.S.c. \$§ 3301 3432; Administrative Procedure Act, 5 U.S.C. § 553.
- to read as follows: Section 271.703(d) is amended by adding paragraph (179)
- \$ 271.703 Tight Formations.
- (d) Designated tight formations.
- (179) Pictured Clifts Formation in New Mexico.

RM79-76-204 (New Mexico - 25).

North, Range 5 West, Sections 15 through 21 5/2 of 24, and Range 4 West, Sections S/2 of 30, 31 and 32; Township 25 24 North, Range 5 West, All Sections; Township 25 North, West, Sections 3 through 10 and 13 through 36; Township through 35, and S/2 of 36; Township 24 North, Range 4 Township 23 North, Ranges 3, 4 and 5 West, All Sections; Township 24 North, Range 3 West, Sections 19, 20, 26 Sections 5 through 9, 16 through 21, and 25 through 36; New Mexico, in Township 22 North, Range 2, 3, 4 and 5 West, Formation is located in Rio Arriba and Sandoval Counties, (i) Delineation of formation. The Pictured Cliffs

25 through 30, NMPM.

(ii) Depth. The Picture Cliffs Formation is defined as that interval at a depth of approximately 3,046 feet to 3,141 feet on the Induction Electric Log from the John E. Schalk, Cinco Diablos Well No. 6. The average depth to the top of the Pictured Cliffs Formation is 2,685 feet.

### NEW MEXICO OIL CONSERVATION DIVISION

CASE 10432

January 9, 1992

EXHIBIT NO. 4

### TIGHT FORMATION AREA DESIGNATED NM - 29

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within 30 days after the time allowed for filing a protest, the instant request shall be treated as an application for authorization pursuant to section 7 of the Natural Gas Act.

### Lois D. Cashell,

Secretary.

[FR Doc. 91-26572 Filed 11-4-91; 8:45 am] BILLING CODE 6717-01-M

### [Docket No. JD92-00842T New Mexico-29]

### The United States Department of the interior, Bureau of Land Management; Receipt of Determination Designating Tight Formation

October 29, 1991.

Take notice that on October 24, 1991, the United States Department of the Interior, Bureau of Land Management (BLM), submitted the above-referenced notice of determination to the Commission, pursuant to § 271.703(c)(3) of the Commission's regulations, that the Pictured Cliffs Formation in a portion of Rio Arriba County, New Mexico, qualifies as a tight formation under section 107(b) of the Natural Gas Policy Act of 1978 (NGPA). The notice covers approximately 76,800 acres. Of this total, roughly 30.720 acres fall within the Carson National Forest. The remaining acreage, approximately 46,080 acres. falls within the Jicarilla Apache Indian Reservation. The recommended area consists of all of Sections 4-9, 16-21, and 28-33 in T29N, R3W (NMPM), all of Sections 1-36 in T29N, R4W (NMPM), all of Sections 1-36 in T30N, R3W (NMPM), all of Sections 1, 2, 11-14, 23-26, 35 and 36 in T30N, R4W (NMPM), and all of Sections 4-9, 16-21, and 28-33 in T31N, R3W (NMPM). The notice of determination also contains the BLM's findings that the referenced portion of the Pictured Cliffs Formation meets the requirements of the Commission's regulations set forth in 18 CFR part 271.

The application for determination is available for inspection, except for material which is confidential under 18 CFR 275.206, at the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426. Persons objecting to the determination may file a protest, in accordance with 18 CFR 275.203 and 275.204, within 20 days after the date this notice is issued by the Commission.

### Lois D. Cashell.

Secretary.

[FR Doc. 91–26573 Filed 11–4–91, 8:45 am]

### [Docket No. TM92-4-20-000]

### Algonquin Gas Transmission Co.; Proposed Changes in FERC Gas Tariff

October 29, 1991.

Take notice that Algonquin Gas Transmission Company ("Algonquin") on October 25, 1991, filed proposed changes in its FERC Gas Tariff, Third Revised Volume No. 1, as set forth in the revised tariff sheets, to be effective November 25, 1991.

Appendix A Tariff Sheets

Fourth Revised Sheet No. 92 Third Revised Sheet No. 93 Fourth Revised Sheet No. 674D Third Revised Sheet No. 674G Third Revised Sheet No. 674K Third Revised Sheet No. 674M Third Revised Sheet No. 674N Third Revised Sheet No. 674N

Appendix D Tariff Sheet

Substitute Fourth Revised Sheet No. 92

Algonquin states that the purpose of this filing is to update the amount of take-or-pay charges to be billed to Algonquin by CNG Transmission Corporation and National Fuel Gas Supply to be recovered by Algonquin by operation of § 33.7 of the General Terms and Conditions to Algonquin's FERC Gas Tariff, Third Revised Volume No. 1. Algonquin also states that the revised take-or-pay surcharges are the result of revised allocation methods imposed by its pipeline suppliers in response to the Commission's Order No. 528 and 528–A.

Algonquin notes that copies of this filing were served upon each affected party and interested state commissions.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal **Energy Regulatory Commission, 825** North Capitol Street, NE., Washington, DC 20428, in accordance with §§ 385.214 and 385.211 of the Commission's Rules and Regulations. All such motions or protests should be filed on or before November 5, 1991. Protests will be considered by the Commission in determining the appropriate action to be taken but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

### Lois D. Cashell,

Secretary.

[FR Doc. 91-26574 Filed 11-4-91; 8:45 am]

### [Docket No. TM92-2-4-000]

### Granite State Gas Transmission, Inc.; Proposed Changes in Rates

October 30, 1991.

Take notice that on October 28, 1991, Granite State Gas Transmission, Inc. (Granite State) 300 Friberg Parkway, Westborough, Massachusetts 01581 tendered for filing Seventh Revised Sheet No. 25 in its FERC Gas Tariff, Second Revised Volume No. 1, for effectiveness on October 3, 1991.

According to Granite State, it provides storage services for Bay State Gas Company and Northern Utilities, Inc., under its Rate Schedule S-1 with storage capacity provided in a facility operated by Penn-York Energy Corporation (Penn-York) pursuant to Penn-York's Rate Schedule SS-1.

Granite State further states that, on June 28, 1991, Penn-York filed a motion under section 4(e) of the Natural Gas Act to make effective on July 1, 1991, the suspended rates for its Rate Schedule SS-1 storage service, pending in Docket No. RP91-68-900. It is further stated that, in an order issued August 2, 1991, the Commission accepted Penn-York's motion rates, subject to refund. Granite State further states that on August 22, 1991, it filed revised rates in its Rate Schedule S-1 tracking the Penn-York Rate Schedule SS-1 rates that the Commission had accepted in its August 2, 1991 order. (Docket No. TM91-11-4-000). Granite State's filing was accepted in a Letter Order dated September 19. 1991 "subject to Granite State promptly tracking any further rate changes" by Penn-York.

Granite State states that, on October 3, 1991, the Commission issued a further Order Granting and Denying Rehearing Requests in Docket Nos. RP91-68-000, et al., directing Penn-York to revise the rates for Rate Schedule SS-1 service, effective with the date of the order. It further states that Penn-York filed revised rates on October 15, 1991, in compliance with the Commission's October 3, 1991 order.

According to Granite State, its filing tracks in its Rate Schedule S-1 the change filed by Penn-York in compliance with the Commission's October 3, 1991 order.

Granite State states that copies of its filing were served on its storage service customers, Bay State Gas Company and Northern Utilities, Inc. and also on the regulatory commissions of the states of Maine, Massachusetts and New Hampshire.

Any person desiring to be heard or to protest said filing should file a motion to

### STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

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

CASE NO. 10264 ORDER NO. R-9495

APPLICATION OF ROBERT L. BAYLESS FOR DESIGNATION OF A TIGHT FORMATION, RIO ARRIBA COUNTY, NEW MEXICO

### ORDER OF THE DIVISION

### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 21, 1991, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 6th day of May, 1991 the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

### **FINDS THAT:**

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Robert L. Bayless, requests that the Division in accordance with Section 107 of the Natural Gas Policy Act and 18 C.F.R. §271.703 recommend to the Federal Energy Regulatory Commission that the Pictured Cliffs formation underlying the following lands situated in Rio Arriba County, New Mexico, hereinafter referred to as the Pictured Cliffs formation, be designated as a "tight formation" in said Federal Energy Regulatory Commission's regulations:

TOWNSHIP 29 NORTH, RANGE 2 WEST, NMPM Sections 1 through 36: All

TOWNSHIP 29 NORTH, RANGE 3 WEST, NMPM Sections 1 through 36: All Case No. 10264 Order-No. R-9495 Page No. 2

### TOWNSHIP 29 NORTH, RANGE 4 WEST, NMPM Sections 1 through 36: All

TOWNSHIP 30 NORTH, RANGE 2 WEST, NMPM Sections 1 through 36: All

### TOWNSHIP 30 NORTH, RANGE 3 WEST, NMPM Sections 1 through 36: All

### TOWNSHIP 30 NORTH, RANGE 4 WEST, NMPM

Sections 1 and 2: All

Sections 11 through 14: All Sections 23 through 26: All

Sections 35 and 36: All

### TOWNSHIP 31 NORTH, RANGE 2 WEST, NMPM Sections 2 through 36: All

TOWNSHIP 31 NORTH, RANGE 3 WEST, NMPM Sections 1 through 36: All

### TOWNSHIP 32 NORTH, RANGE 2 WEST, NMPM

Sections 7 through 10: All Sections 15 through 22: All Sections 27 through 35: All

### TOWNSHIP 32 NORTH, RANGE 3 WEST, NMPM

Sections 7 through 36: All

containing 193,090 acres, more or less; of which approximately 30,720 acres are within the Carson National Forest and the remaining is located within the Jicarilla Apache Indian Reservation.

(3) The applicant has designated the above-described area the "Cabresto Tight Gas Area" and included within the confines of said area are portions of the Choza Mesa-Pictured Cliffs Pool, East Blanco-Pictured Cliffs Pool, and Gobernador-Pictured Cliffs Pool.

Case No. 10264 Order No. R-9495 Page No. 3

- (4) The type log presented by the applicant to represent the Pictured Cliffs formation in the area proposed for "tight formation" designation is the Welex Induction Guard Log run in the applicant's Jicarilla 474 Well No. 4 located 1850 feet from the South line and 1775 feet from the East line (Unit J) of Section 31, Township 30 North, Range 3 West, NMPM, East Blanco-Pictured Cliffs Pool, Rio Arriba County, New Mexico.
- (5) The top and base of the Pictured Cliffs formation are found at depths of 3699 feet and 3974 feet, respectively, on said type log.
- (6) One hundred and twenty four wells have been drilled into or through the Pictured Cliffs formation in the proposed designation area. Of these, fifty-three are presently capable of producing from the Pictured Cliffs formation.
- (7) The average depth of the top of the Pictured Cliffs formation in the proposed Cabresto Tight Gas Area was testified to be 3715 feet.
- (8) The geological evidence presented by the applicant indicates that the Pictured Cliffs formation underlies essentially all of the area under consideration. The formation consists of a marine clay filled very fine to fine grained, reasonably well sorted, subround to subangular, slightly calcareous, "salt and pepper" sandstone; the dark grains are predominately glauconite, mica and carbonaceous shale. This sandstone was deposited as a lenticular beach and nearshore bars which represent the last marine strata in the northeasterly regression of the Cretaceous Sea and therefore creating stratigraphic entrapment for the accumulation of natural gas. The geologic evidence also indicates that there are two main zones within the Pictured Cliffs formation in this area with each zone representing a regressive sequence separated by a transgressive marine tongue of shale. There are also interbeds of this shale in the lower portion of each main zone, however, such interbeds became thinner and fewer in the upper portions.
- (9) Further, geological testimony indicates that the sandstone grains are coated with an illite-smectite authigenic clay and is pervasive throughout the vertical extent of the Pictured Cliffs formation. This clay coating serves to reduce the effective perapeability of the formation.
- (10) The applicant included in his testimony as direct evidence a technical paper entitled Effect of Overburden Pressure and Water Saturation on Gas Permeability of Tight Sandstone Cores, authored by Rex D. Thomas and Don C. Ward, which was presented at the Society of Petroleum Engineers (SPE) 46th Annual Fall Meeting, New Orleans, October 3-6, 1971 as SPE 3634. Said paper was a published report of research conducted by the U.S. Bureau of Mines which attempts to verify that the gas

Case No. 10264 Order-No. R-9495 Page No. 4

permeability of tight sandstone cores is markedly decreased with increasing overburden pressure. Said research was conducted utilizing Pictured Cliffs formation cores taken from wells within Project Gasbuggy located in Section 36, Township 29 North, Range 4 West, NMPM, Choza Mesa-Pictured Cliffs Pool, Rio Arriba County, New Mexico, (Division Order No. R-3197). Project Gasbuggy was a part of the Plowshare Program of the U.S. Atomic Energy Commission in which a 29-kiloton nuclear explosive was detonated at a depth of 4,227 feet on December 10, 1967 for the purpose of conducting the United States' first underground nuclear experiment for the stimulation of low productivity gas reservoirs.

- (11) In said report, it was concluded from approximately 200 core samples taken from the Choza-Mesa Pictured Cliffs Pool in Project Gasbuggy, yielding an average initial gas permeability of 0.16 millidarcies (md), dry and an average water saturation of 48 percent, an effective overburden pressure for this reservoir of 3000 psi results in a total reduction of initial permeability of 95 percent to 0.008 md.
- (12) Said technical report has been utilized to support many of the previously approved "tight gas areas" throughout New Mexico.
- (13) Utilizing the technical procedure and calculations from said SPE paper, an analysis on three additional cored wells from the Cabresto Tight Gas Area along with a core utilized in the report indicates the average dry air permeability for the Pictured Cliffs formation from the four wells to be 0.66 md, the net confining overburden pressure at a depth of 3715 feet is approximately 2800 psi, the average core water saturation was found to be 46 percent. The resulting in-situ permeability from the four cored wells was determined to be 0.035 md.
- (14) Obtaining stabilized unstimulated gas production flowrates for Pictured Cliffs wells is not a standard procedure in this area, therefore all existing Pictured Cliffs wells within said area have been stimulated with fracture treatments (usually hydraulic and not nuclear in nature).
- (15) In preparation for this Cabresto Tight Gas study, the applicant performed a "par dly" unstimulated flow test on its Jicarilla 31-3-32 Well No. 1 (acid was used to insure that the perforations in said wellbore were open) located in Unit L of Section 32, Township 30 North, Range 3 West, NMPM, Rio Arriba County, New Mexico, which resulted in a calculated 24-hour flowrate of 22.0 MCFD.
- (16) The natural gas produced from the Pictured Cliffs formation in the Cabresto Tight Gas Area is virtually "dry" with a few wells reporting very little condensate production, which occurred only after stimulation.

Case No. 10264 Order No. R-9495 Page No. 5

- (17) Within the proposed area there is a recognized aquifer being the Ojo Alamo, located over 500 feet above the Pictured Cliffs formation.
- (18) Existing State of New Mexico and Federal Regulations, administered by the U.S. Forest Service, U.S. Bureau of Land Management, and the U.S. Department of Energy, relating to drilling, casing and cementing of wells are in effect to help assure that development of the Pictured Cliffs formation will not adversely affect said aquifer.
- (19) The data available indicates that the Pictured Cliffs formation within the proposed designated area, as described in Finding Paragraph No. (6) above, meets all the criteria set forth in 18 C.F.R. §271.703(C)(2)(a), (b), (c), and (d), viz:
  - (a) the estimated average <u>in-situ</u> permeability throughout the pay section is expected to be less than 0.1 millidarcies;
  - (b) the stabilized production rate, against atmospheric pressure, for wells completed for production in the Pictured Cliffs formation, without stimulation, is not expected to exceed 105 MCF per day (the average depth of the top of the formation is 3715 feet);
  - (c) no well drilled into the formation is expected to produce more than five barrels of crude oil per day; and
  - (d) the Division has not authorized the formation or any portion thereof to be developed by infill drilling.
- (20) The Pictured Cliffs formation underlying the lands described in Finding Paragraph No. (2) above should be recommended to the Federal Energy Regulatory Commission for designation as a tight formation.

### IT IS THEREFORE ORDERED THAT:

(1) It be and hereby is recommended to the Federal Energy Regulatory Commission pursuant to Section 107 of the Natural Gas Policy Act of 1978, and 18 C.F.R. §271.703, that the Pictured Cliffs formation, as further described in Finding Paragraph Nos. (4) and (5) of this Order, underlying the following described lands in Rio Arriba County, New Mexico, be designated as a tight formation:

TOWNSHIP 29 NORTH, RANGE 2 WEST, NMPM

Sections 1 through 36: All

Case No. 10264 Order-No. R-9495 Page No. 6

### TOWNSHIP 29 NORTH, RANGE 3 WEST, NMPM

Sections 1 through 36:

All

### TOWNSHIP 29 NORTH, RANGE 4 WEST, NMPM

Sections 1 through 36:

All

### TOWNSHIP 30 NORTH, RANGE 2 WEST, NMPM

Sections 1 through 36:

All

### TOWNSHIP 30 NORTH, RANGE 3 WEST, NMPM

Sections 1 through 36:

All

### TOWNSHIP 30 NORTH, RANGE 4 WEST, NMPM

Sections 1 and 2:

All

Sections 11 through 14:

All

Sections 23 through 26:

All

Sections 35 and 36: All

### TOWNSHIP 31 NORTH, RANGE 2 WEST, NMPM

Sections 2 through 36:

All

### TOWNSHIP 31 NORTH, RANGE 3 WEST, NMPM

Sections 1 through 36:

All

### TOWNSHIP 32 NORTH, RANGE 2 WEST, NMPM

Sections 7 through 10:

All

Sections 15 through 22:

All

Sections 27 through 35:

All

### TOWNSHIP 32 NORTH, RANGE 3 WEST, NMPM

Sections 7 through 36:

All

containing 193,090 acres, more or less, to be designated the Cabresto Tight Gas Area.

(2) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Cuse No. 10264 Order No. R-9495 Page No. 7

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

Director

SEAL

### STATE OF NEW MEXICO

### ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT



OIL CONSERVATION DIVISION

BRUCE KING

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

July 11, 1991

Federal Energy Regulatory Commission 823 N. Capitol Street NE Washington, D.C. 20426

ATTN:

Marilyn Rand, Director

Division of Producer Resolution

Dear Ms. Rand:

I am writing to you to confirm our telephone conversation on Thursday July 11, 1991, it is my understanding that a recommendation from the N.M. Oil Conservation Division on a proposed "Tight Formation" application recently considered by this agency will not be required since all the acreage involved is on Federally controlled lands (193,090 acres total, 30,720 acres Carson National Forest and 162,370 acres Jicarilla Apache Indian Reservation).

Thank you for your assistance in this matter.

Sincerely,

MICHAEL E. STOGNER

Chief Hearing Officer/Engineer

MES/jc

cc: OCD - Aztec

Kevin McCord - Farmington Robert L. Bayless - Farmington Tommy Roberts - Farmington

Case File: 10264

U.S. Forest Service - Blanco, NM

U.S. BLM - Albuquerque



### Linius States Department of the Interior

AM 8 47

BUREAU OF LAND MANAGEMENT ALBUQUERQUE DISTRICT OFFICE 435 MONTANO N.E ALBUQUERQUE, NEW MENICO 87107



3160 (015)

October 18, 1991

Marilyn Rand, Director Division of Producer Regulation Federal Energy Regulatory Commission 825 North Capitol Street NE Washington, DC 20426

Dear Ms. Rand:

This jurisdictional agency hereby designates the Pictured Cliffs formation underlying the following described lands in Rio Arriba County, New Mexico as a tight formation, BLM Docket No. NM-74-91, under Section 107 of the NGPA:

a. Township 29 North, Range 3 West, NMPM
Sections 4 through 9: All

Sections 16 through 21: All Sections 28 through 33: All

- b. Township 29 North, Range 4 West, NMPM Sections 1 through 36: All
- c. Township 30 North, Range 3 West, NMPM
  Sections 1 through 36: All
- d. Township 30 North, Range 4 West, NMPM

Sections 1 and 2: All Sections 11 through 14: All Sections 23 through 26: All Sections 35 and 36: All

e. Township 31 North, Range 3 West, NMPM

Sections 4 through 9: All Sections 16 through 21: All Sections 28 through 33: All

The total area encompasses 76,800 acres, more or less, of which approximately 30,720 acres are within the Carson National Forest and the remaining is located within the Jicarilla Apache Indian Reservation, situated in Rio Arriba County, New Mexico.

b. The applicant, Robert L. Bayless, has designated the area described above as the "Cabresto Tight Gas Area" and included within the confines of said area are portions of the Choza Mesa Pictured Cliffs Pool, East Blanco Pictured Cliffs Pool, and Gobernador Pictured Cliffs Pool.

- c. A recognized aquifer, Ojo Alamo, is located within the designated area over 500 feet above the Pictured Cliffs formation. Existing Federal and State of New Mexico Regulations, administered by the U.S. Forest Service, U.S. Bureau of Land Management, and the U.S. Department of Energy, relating to drilling, casing, and cementing of wells are in effect to help assure that development of the Pictured Cliffs formation will not adversely affect said aquifer.
- d. The estimated average  $\underline{in-situ}$  gas permeability, throughout the pay section, is expected to be 0.1 millidarcy or less.
- e. The stabilized production rate, against atmospheric pressure, of wells completed for production in the Pictured Cliffs formation, without stimulation, is not expected to exceed the production rate of 105 MCF per day at the average 3715 foot depth of the top of the formation.
- f. No well drilled into the designated tight formation is expected to produce, without stimulation, more than five barrels of crude oil per day.
- g. The formation or any portion thereof has not been authorized to be developed by infill drilling.

Evidence was presented at a public hearing held by the New Mexico Oil Conservation Division, Case No. 10264, on March 21, 1991, at Santa Fe, New Mexico. Exhibits and other documentation are enclosed. The lands involved are 100% Federal/Indian, so no designation will be submitted by the State of New Mexico.

This jurisdictional agency reduced the area requested by the applicant to approximately forty (40) percent of its original size due to lack of supporting data for the eliminated acreage. The applicant, Robert L. Bayless, at an informal conference held in this office on July 22, 1991, presented additional technical interpretation of their data.

It is requested that this jurisdictional agency be advised in writing when the 45 day review period will end and the appropriate FERC Order No. and/or State No. (NM-\_\_\_) assigned to this tight formation be included.

Persons objecting to this determination may file a protest directly with the Federal Energy Regulatory Commission, in accordance with 18 CFR Part 275.203 and 275.204, within 20 days after the notice is published in the Federal Register by the FERC.

If you have any questions please contact Allen F. Buckingham at FTS 479-8765 or (505) 761-8765.

Sincerely yours,

for Assistant District Manager

Mineral Resources

### Enclosures

cc:

Robert L. Bayless (Kevin McCord) NM Oil Conservation Division (Michael Stogner) William F. Carr (Amoco Prod. Co.) Tommy Roberts (Mallon Oil Co. & Schalk Dev. Co.) H. L. Kendrick (El Paso Natural Gas Company) NM-922 (Joe Chesser)

1	NEW MEXICO OIL CONSERVATION DIVISION
2	STATE OF NEW MEXICO
3	CASE NO. 10420
4	
5	IN THE MATTER OF:
6	
7	The Application of Union Oil
8	Company of California, d/b/a UNOCAL, for designation of a
9	tight formation, Rio Arriba County, New Mexico.
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1	
۱2	BEFORE:
13	MICHAEL E. STOGNER
	Hearing Examiner
L <b>4</b>	
l 5	
16	
17	Bureau of Land Management Building 435 Montano Road, Northeast
18	Albuquerque, New Mexico
19	December 20, 1991
20	
21	BEFORE EXAMINER CATANACH
2 2	REPORTED BY: OIL CONSERVATION DIVISION
23	DEBBIE VESTAL AMELO EXHIBIT NO
2 4	Certified Shorthand Reporter  CASE NO
2 5	CASE NO.
- •	
	COPY

1 dismissed.

I believe Mr. Buckingham has a statement at this point in time.

MR. BUCKINGHAM: Yes. Since this area involves infill drilling, I'd like to just put in for a matter of record what FERC's feeling on infill drilling is at this stage of the game.

The FERC issued a notice of proposed rule making on March 20, 1991. The subject was qualifying certain tight formation gas for tax credit.

Within that proposed rule making, a portion of which I quote, "was previously authorized to be developed by infill drilling if in the jurisdictional agency's judgment the formation cannot be developed without the tax credit for incentive price or the incentive price for wells spud before May 13, 1990."

I talked to FERC on December 6, 1991, after our informal meeting here with the representatives from the OCD and UNOCAL regarding economic data because this is an infill drilling area.

The reply I got from FERC was that if we were -- if you go in and use economic data

alone for any way to support your case, it will result in an automatic tolling letter from the FERC because even though we realize it, you realize it, the industry realizes it, everybody realizes it, that the tax credit is what is driving this rush to get wells drilled, but the regulation still says price incentive.

There is no price incentive, but until that regulation is changed, the FERC is bound by that regulation. They must follow that regulation to the letter.

So as a result, when we go in with the recommendation and designation of this area, I will state — the BLM will state in there that the only reason this economic data is there is just for general information. The application, if we decide to designate it, will stand on its own merits based on permeability, crude oil production, and production according to the table listed in the FERC guidelines.

I asked -- I keep asking FERC. I've been following this since March 20, 1991. They are not in a hurry to issue a rule. I'm afraid they're waiting for a test case. Since I know they will read this transcript, this might be a

test case. But I just want to make that very 1 clear that we cannot use economic data to prove 3 our case. As far as infill drilling, I also asked FERC about -- we are talking about an area here. 5 Since the boundaries are a federal unit and there is no substantial infill drilling, all we're looking at is a federal unit. So that should stand by itself. That's all I have to say. 9 10 EXAMINER STOGNER: Thank you, Mr. Buckingham. 11 Does anybody else have anything further 12 in this case? 13 Mr. Carr, I'm going to ask you to 14 provide me a rough draft -- I'm sorry -- provide 15 me and Mr. Buckingham with a rough draft order. 16 17 MR. CARR: Okay. EXAMINER STOGNER: If there's nothing 18 19 further in Case 10420, I'll take it under 20 advisement. 21 (The proceedings were concluded.) 22 23 24 25

the in the articles industry, shows made the extilence of any flight crowment is employee drug use, and temenstrates that the level of drug alone in the peneral population is not as add in the airlines' workforce.

[172.17 m; 31=1441 F Fed 3=28=91; 8:45 am] 3800.43 0002 (910=13=4)

#### DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

18 CFR Part 271

1005 (at Ma), FM31-3-6001

Qualifying Cartain Tight Formation Gas for Tax Credit; Proposed Relemaking

Issued March 10, 1991. A STROY: Fad on! Flaggy Regulatory Commission, DOE.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Federal Energy 2-galatory Commission (Commission) is proposing to amend its regulations to marry out Congress' intent in restoring the tax credit for gas from newly drilled " the formation wells. In this notice, the Commission proposes to establish maximum allowable production rates for natural gas produced from tight Demations whose average depth ekaceds 15.009 feet, so that gas from such formations may qualify for the tax andit. The Commission also proposes to permit jurisdictional agencies to lesi mete as a tight formation a firmation that (1) does not meet the permeability standard for tight formations (but meets the production mee standards) if the jurisdictional stancy shows that the tax credit (or the in tentive price for wells spudded before May 13, 1990) is necessary to provide masonable incentives to produce catural gas from that formation, or (2) is is previously authorized to be day sloped by infill drilling if, in the juds-incidenal agency's judgment, the or, action cannot be developed without he rax hedit for incentive price for z ella spudded before May 13, 1990). or res: An original and 11 copies of the written unminents on this proposed rule most be filed as in the Commission by

April 20, 1991.
RODARSSES: All fillings should be hitselfied to the Sucretary, Federal Eversy Regulatory Commission, 825 for in Capital St. NE., Washington, DC 1913. and should refer to Bocket No. M31-400.

FOR FURTHER INFORMATION CONTACT: District Blakeway, Office of the General

Counsel, Federal Energy Regulatory Commission, 825 North Capitol Street NE., Washington, DC 20426, (202) 208– 0224.

SUPPLEMENTARY INFORMATION: In addition to publishing the full text of this document in the Federal Register, the Commission also provides all interested persons an opportunity to inspect or copy the contents of this document during normal business hours in room 3008, 941 North Capitol Street NE., Washington, DC.

The Commission Issuance Posting System (CIPS), an electronic bulletin board service, proviles access to the texts of formal documents issued by the Commission. CIFS is available at no charge to the user and may be accessed using a personal computer with a modem by dialing (202) 203-1397. To access CIPS, set your communications software to use 300, 1200 or 2400 band. full duplex, no parity. 8 data bits, and 1 stop bit. The full text of this notice of proposed rulemaking will be available on CIPS for 00 days from the date of issuance. The complete text on diskette in WordPerfect format may also be purchased from the Commission's copy contractor, La Dorn Systems Corporation, also located in room 3008. 941 North Capitol Street NE., Washington, DC 20426.

#### I. Introduction

As part of the Revenue Reconciliation Act of 1390,1 signed into law by the President on November 5, 1990, the tax credit for nonconventional fuels under Section 29 of the International Revenue Code was extended for two years to continue to provide an incentive to develop nonconventional fuels. The tax credit was also reinstated for one nonconventional fuel for which it had previously lapsed-gas from newly drilled wells in tight formations-by revising the tax code so that tight fermation gas is eligible for the tax credit even if the price for tight formation gas is no longer regulated.

The Federal Energy Regulatory Commission (Commission) is proposing three minor amendments to the Commission's regulations to carry out Congress' intent in restoring the tax credit for a is produced from newly drilled tight formation wells. The Commission is proposing to establish maximum allowable production rates for natural gas produced from tight formation whose average depth exceeds 15,000 feet. In addition, the Commission

CASE NO. 10432

is proposing to permit jurisdictional agencies to designate as a tight formation a formation that (1) does not meet the Commission's permeability standard for tight formations (but meets the production rate standards), if the jurisdiction agency can show that the tax credit (or the incentive price for the wells spudded before May 13, 1990) is necessary to provide reasonable incentives to produce natural gas from that formation, or (2) was previously authorized to be developed by infill drilling if the jurisdiction agency's judgment is that the formation subject to infili drilling cannot be developed without the tax credit (or incentive price for wells spudded before May 13, 1990). These proposed amendments would enable natural gas produced from tight formations of average depths below 15.000 feet, natural gas produced from formations which do not meet the Commission's permeability standard for tight formations, and natural gas produced from formations subject to previously infill drilling orders to qualify for the tax credit. The proposed amendments do not affect the price at which tight formation gas may lawfully be sold.

#### II. Background

Under Section 29 of the Internal Revenue Code, qualified nonconventional fuels are eligible for a production credit that is equal to \$3 per barrel or the Btu barrel-of-oil equivalent (adjusted for inflation). Qualified fuels include (1) oil produced from shale and tar sands. (2) gas produced from geopressured brine, Devonian shale, coal seams, tight formations, or biomass, and (3) liquid, gaseous, or solid synthetic fuels produced from coal (including lignite), including such fuels when used as feedstocks. Prior to amendment by the Revenue Reconciliation Act of 1990, the production credit was available for qualified fuels produced from a well drilled, or a facility placed in service. before January 1, 1991, and sold before January 1, 2001. Under the 1990 Act, the credit was extended for two years to fuels produced from a well drilled, or a facility placed in service, before January 1, 1993, and sold before January 1, 2003.

In addition, before amendment by the 1990 Act, the tax credit for gas produced from tight formations was only available if the price of the gas was regulated by the United States with a maximum lawful price of at least 150 percent of the applicable ceiling price under section 103 of the Natural Gas Policy Act of 1978

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<sup>&</sup>lt;sup>1</sup> Section 11501, Public Law No. 101-503, 164 Stat. 1388-479,

The average depth referred to means the average it pin to the top of the formation.

comments on the appropriate treatment of gas from such wells. A jurisdictional agency may determine that a field qualifies as a tight formation based on a showing that the tax credit is necessary to warrant further development, without considering whether the incentive price is necessary to provide reasonable incontives for production. In such circumstances, should any producer in that field be entitled to collect the tight formation incentive price for gas for wells in that formation spudded before May 13, 1900, based solely on the finding that the tax credit is necessary to warrant further development? Altern itively, should separate procedures be established to consider whether the tight formation incentive price (as opposed to the tax credit) is necessary to provide reasonable incentives to produce natural gas from mose wells?

The third proposed change involves § 271.703(c)(2)(i)(D) of the Commission's regulations. This section currently requires a jurisdictional agency to exclude a formation, or portion thereof, that is subject to a prior infill drilling order from determination as a tight formation if the jurisdictional agency's judgment is that the formation subject to infill drilling can be developed without the incentive price. The Commission proposes to amend this section to refer to the tax credit for the same reasons given for amending § 271.703(c)(2)(ii).

#### III. Written Comment Procedure

The Commission invites all interested persons to submit written data, views, and other information concerning the proposals in this Notice of Proposed Rulemaking. All comments in response to this Notice should be submitted to the Secretary, Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, and should refer to Docket No. RM91–8–000. An original and fourteen copies should be filed with the Commission within 30 days after publication of this Notice in the Federal Register.

Written comments will be placed in the Commission's public files and will be available for inspection in the Commission's Public Reference Room, 941 North Capitol Street NE., Washington, DC, during regular business hours.

#### IV. Administrative Findings

A. Regulatory Flexibility Act Statement

The Regulatory Flexibility Act (RFA) <sup>11</sup> requires the Commission to describe the impact that a proposed rule would have on small entities or to certify that the rule will not have a significant economic impact on a substantial number of small entities. <sup>12</sup> The Commission is not required to make an analysis if a proposed rule will not have such an impact. <sup>13</sup>

In general, the economic impact of a proposed rule is not "significant" within the meaning of the RFA if the impact on small entities is expected to be beneficial. <sup>14</sup> The proposed rule will enable certain natural gas producers that may qualify as small entities to qualify for tax credits. The Commission believes this impact is beneficial and therefore, certifies that this proposed rule will not have a significant economic impact on a substantial number of small entities. <sup>15</sup>

#### B. Environmental Review

The Commission is not preparing an environmental assessment or environmental impact statement in this proceeding because the proposed amendments do not substantially change the effect of the regulations being amended. The proposed amendments provide procedures for carrying out the intent of Congress in reinstating the tax credit for gas produced from new wells in tight formations, but would have no significant effect on the human environment. 16

#### C. Information Collection Statement

The Office of Management and Budget's (OMB) regulations require

OMB to approve certain information collection requirements imposed by agency rule.<sup>17</sup> In Order No. 523, *supra*, the Commission stated that it would continue to process applications for well category determinations through December 31, 1992, so that producers could qualify for tax credits. This proposal will not increase the regulatory burden under existing regulations on producers seeking to qualify light formations of natural gas to be eligible for tax credits. The Commission, however, is notifying OMB of its actions in this notice of proposed rulemaking.

#### List of Subjects in 18 CFR Part 271

Continental shelf, Natural gas, Price controls, Reporting and recordkeeping requirements.

In consideration of the foregoing, the Commission proposes to amend part 271, chapter I, title 18, Code of Federal Regulations, as set forth below.

By direction of the Commission. Lois D. Cashell, Secretary.

#### PART 271—CEILING PRICES

1. The authroity citation for part 271 is revised to read as follows:

Authority: 15 U.S.C. 717-717w; 42 U.S.C. 7101-7352; E.O. 12009, 3 CFR, 1978 Comp., p 142; 15 U.S.C. 3301-3432.

2. In § 271.703, paragraphs (c)(2)(i)(B', (c)(2)(i)(D), and (c)(2)(ii) are revised to read as follows:

#### § 271.703 Tight formations.

- (c) · · ·
- (2)
- (i) · · ·
- (B) The stabilized production rate, against atmospheric pressure, of wells completed for production in the formation, without stimulation, is not expected to exceed the production rate determined in accordance with the following table:

<sup>17 5</sup> CFR 1020.13 (1990).

If the average depth to the top of the formation (in feet)	The maximum allowable	
Exceeds—	But does not exceed—	production rate (in thousand cubic feet per day) may not exceed—
0	1,000 1,500	14 51

<sup>11</sup> J.C.S.C. 501-12 (1988).

if The Antidefines a namult entity" us a small five oness, a small not duriprofit enterprise, or a small comment pure in tion. 5 U.S.C. But(b) (1988). A second of the consults defined by reference to section 3 of the Situation of the second of the consults of the consultation of the co

not dominant in its field of operation." 13 U.S.C. 6.32(a) (1988).

<sup>13 5</sup> U.S.C. 605(b) (1988).

<sup>&</sup>lt;sup>14</sup> Mid-Tex Electric Compressive, Inc. v. FSRC, 773 F.2d 327, 340–43 (DC Cir. 1985).

<sup>15 5</sup> U.S.C. 605(n) (1988).

<sup>16</sup> Section 380.4(a)(2)(ii) of the Commission's regulations categorically exempt from environmental review Commission proposals for promulgation of rules that are clarifying, corrective or procedural, or that do not substantially change the effect of regulations being amended. Signature \$300.2(a) for the definition of "categorical archives".

(NGPA).2 Section 107(c)(5) of the NGPA authorized the Commission to prescribe maximum lawful prices that exceeded the otherwise applicable ceiling prices for the first sale of "high-cost" natural gas produced under such other conditions as the Commission determines to present extraordinary risks or costs. In Order No. 99, issued August 15, 1980, the Commission, acting under NGPA section 107(c)(5), authorized a ceiling price of 200 percent of the maximum lawful price under NGPA section 103 for gas produced from qualified tight formations.4 The incentive price was not provided for gas from tight formations below 15,000 feet, because ceiling prices for gas from below such depths had been previously removed under NGPA section 121(b).

All tight formation gas that qualified for the NGPA section 107(c)(5) incentive ceiling price established by Order No. 99 qualified for the tax credit. However, by 1990 a substantial portion of the tight formation gas had been deregulated and, accordingly, no longer qualified for the tax credit. Under the Natural Gas Wellhead Decontrol Act of 1989,6 natural gas that was not subject to a first sale contract on the date of enactment was immediately deregulated. Gas sold under contract that expire or are terminated, or which the parties renegotiate to provide that maximum lawful prices no longer apply, is also deregulated. Gas from newly spudded wells will be deregulated on May 15, 1991, and all remaining wellhead price controls will be removed on January 1, 1993. In Order No. 523, the Commission amended its regulations to reflect the provisions of the Decontrol Act, and noted that producers may voluntarily file applications for well category determinations for any NGPA category, including high-cost gas, until

January 1, 1993, when section 503 of the NGPA is repealed. The Commission stated that it would continue to process such applications for well category determinations until that date in order to allow producers to obtain tax credits that are dependent upon such determinations, even if the gas has been otherwise decontrolled.

In addition, in Order No. 519, issued February 12, 1990, the Commission terminated the incentive ceiling price for sales of tight formation natural gas produced from wells spudded or recompleted after May 12, 1990.7 The Commission concluded that since most natural gas had already been decontrolled, or was being sold at levels beneath the applicable ceiling price, the incentive ceiling prices for tight formation gas were no longer necessary to stimulate new production of such gas. and that commitment of new money by producers in reliance on the incentive ceiling price was no longer in the public interest.8 Thus, the tax credit for gas from tight formations, which was dependent on the existence of a regulated price, lapsed for tight formation gas from wells spudded or recompleted after May 12, 1990, or for which the price has been deregulated under the Decontrol Act.

The 1990 Act allows such deregulated gas nevertheless to qualify for the tax credit by making it available for gas from tight formations that was committed or dedicated to interstate commerce (as defined in the NGPA) as of April 20, 1977, or produced after December 31, 1990, from a well drilled after the date of enactment. The requirement that the price of the gas be regulated was deleted.

#### III. Discussion

Section 271.703 of the regulations provides that a formation must meet three guidelines to qualify as a tight formation: a permeability standard, a maximum production rate, and an oil production limit. One of these guidelines—the maximum stabilized production rate in § 271.703(c)(2)(i)(B)—is tied to the average depth of a formation. Because gas below 15,000 feet was deregulated on November 1, 1979, the Commission only established maximum stabilized production rates for

3 15 U.S.C. 3301-3342 (1938). However, the credit

is not available unless the gas was sold at a lawful

formations whose average depth did not exceed that depth. Any gas from below that depth, having no ceiling price, could not therefore qualify for an incentive price. However, since newly drilled wells that produce gas from tight formations below 15,000 feet are now eligible for the tax credit, the Commission proposes to amend § 271.703(c)(2)(i)(B) to establish maximum allowable production rates for formation below that depth. 10 The highest maximum stabilized production rate proposed is for completions at 19,500 feet and deeper. The Commission does not believe there is any need to establish higher rates for production from lower depths, because very little gas is found below 20,000 feet, and the maximum allowable production rate for completions at 19,500 feet is an adequate measure of tight formation production rates from lower depths.

The second proposed change involves § 271.703)c)(2)(ii) of the Commission's regulations. That section currently provides that a jurisdictional agency may designate as a tight formation a formation that meets the maximum allowable production rates for gas and oil, but does not meet the permeability standard of 0.1 millidarcy or less, if the jurisdictional agency shows that the formation exhibits low permeability characteristics, and the tight formation incentive price is necessary to provide reasonable incentives to produce natural gas from that formation. Since there is no longer a tight formation incentive price for gas from wells drilled or recompleted after May 12, 1990, or tight formation gas that has been deregulated under the Decontrol Act, the Commission proposes to amend this regulation to provide that jurisdictional agencies may designate a formation with permeability in excess of the 0.1 millidarcy standard as a tight formation, if it otherwise qualifies as a tight formation, and the tax credit (or the incentive ceiling price for wells spudded before May 13, 1990) is needed to develop the formation.

Some formations with permeability in excess of 0.1 millidarcy, which may be designated tight formations on the ground that the tax credit is needed to develop the formation, may include wells that were spudded before May 13, 1990. The Commission is requesting

price determined without regard to the provisions of NGPA Section 107. [Internal Revenue Code Section 29(e)]. Thus, a producer can utilize the tight formation incentive price by collecting a price in excess of the otherwise applicable maximum, or the tax credit, but not both.

4 Regulations Covering High-Cost Natural Gas Produced From Tight Formations, 45 FR 56934 [Aug.

<sup>4</sup> Regulations Covering High-Cost Natural Gas Produced From Tight Formations, 45 FR 56034 (Aug. 02, 1980), FERC Stats. & Regs. [Regulations Preambles 1977–1981] § 30,183.

<sup>\*</sup> Section 121(b) of the NGPA provided that on the effective date of the Commission's incremental pricing regulations under section 201 of the NGPA, the criling prices for section 107 high-cost gas would no longer apply, except to categories of gas under section 107(c)(5). Incremental price regulations became effective November 1, 1979. See Interim Rules Defining and Deregulating Certain High-Cost Natural Gas. 44 FR 61950 (Oct. 29, 1979). FERC Stats. & Regs. [Regulations Preambles 1977–1981]

<sup>&</sup>lt;sup>6</sup> Public Low No. 101–60, July 26, 1989, 103 Stat. 157 (1989).

Limitation of Incentive Price for High-Cost Gas to Commodity Values, 55 FR 6367 (Feb. 23, 1990), FERC Stats. & Regs., Regulations Preambles §— 30.679.

ald. at p. 31.668.

The Revenue Reconciliation Act of 1990 was signed by the President on November 5, 1990. However, the Conference Report states that gas qualifies for the tax credit if produced from a well drilled after December 31, 1990.

<sup>10</sup> The formula used to establish maximum stabilized production rates below 15,000 feet is the same as that used in Order No. 99 to establish such rates for production fro above 15,000 feet. Regulations Covering High-Cost Natural Gas Produced from Tight Formations, 45 FR 56034 (Aug. 22, 1960), FERC State, & Regs. [Regulations Preambles 1977–1981]

If the average depth to the top of the formation (in feet)			The maximum allowable production rate (in
E	cceeds—	But does not exceed—	thousand cubic teet per day) may not exceed—
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		2,500	64
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000	,	12,500	1,23
500		13,000	1,43
		13,500	1,65
500	,	14,000	1,91
000		14,500	2,21
500		15,000	2,55
		15,500	2,95
500		16,000	3,41
		16.500	3,95
500		17.000	4,56
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(D) If the formation or any portion thereof was authorized to be developed by infill drilling prior to the date of determination and the jurisdictional agency has information which in its judgment indicates that such formation or portion subject to infill drilling can be developed absent the tax credit under section 29 of the Internal Revenue Code (or incentive price established in paragraph (a) of this section for wells spudded before May 13, 1990), then the jurisdictional agency shall not include such formation or portion thereof in its determination.

(ii) The jurisdictional agency may designate as a tight formation any formation that meets the guidelines contained in paragraphs (c)(2)(i)(B) and (c)(2)(i)(C) of this section, but does not meet the guideline contained in paragraph (c)(2)(i)(A) of this section, if the jurisdictional agency makes an adequate showing that the formation exhibits low permeability characteristics, and that eligibility for a tax credit under section 29 of the Internal Revenue Code (or the incentive ceiling price for wells spudded before May 13. 1990) is necessary to provide reasonable incentives for production of

the natural gas from the determined formation due to the extraordinary costs associated with such production.

[FR Doc. 91-7296 Filed 3-28-91; 8:45 am] BILLING CODE 6717-01-M

#### **POSTAL SERVICE**

#### 39 CFR Part 111

Nonmailability of Deceptive Solicitations

AGENCY: Postal Service.
ACTION: Proposed rule.

SUMMARY: The Postal Service proposes to amend its regulations to implement the Deceptive Mailings Prevention Act of 1990, Public Law No. 101–524 (November 6, 1990). Effective May 5, 1991, the Act makes solicitations by nongovernmental entities, which imply a Federal Government connection, approval, or endorsement they do not actually have, nonmailable unless they are contained in certain publications or display prescribed disclaimers.

DATES: Comments must be received on or before April 29, 1991.

ADDRESSES: Written comments on the proposal should be sent to the Assistant General Counsel, Consumer Protection Division, Law Department, U.S. Postal Service, 475 L'Enfant Plaza West SW., Washington, DC 20260-1144. Copies of all written comments received will be available for inspection and photocopying between 9 a.m. and 4 p.m. each business day, in room 6347, Postal Service Headquarters, 475 L'Enfant Plaza West, SW., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Mr. John F. Ventresco, (202) 268–3085.

SUPPLEMENTARY INFORMATION: The Deceptive Mailings Prevention Act of 1990 (Pub. L. No. 101-524, November 6. 1990) adds new subsections (f) and (g) to section 3001 of title 39, United States Code, and makes them applicable to matter deposited for mailing and delivery on or after 180 days after enactment—i.e., on or after May 5, 1991. The new subsections deal with any solicitation by a nongovernmental entity containing terms or symbols that reasonably could be interpreted or construed as implying a Federal Government connection, approval, or endorsement. If the soliciting entity does not have such connection, approval, or

## The Natural Gas Policy Act: The Texas Approach.

A Handbook for Operators.



#### RAILROAD COMMISSION OF TEXAS

Lena Guerrero, Chairman James E. (Jim) Nugent, Commissioner Robert Krueger, Commissioner

BEFORE EXAMINER CATANACH

OIL CONSERVATION DIVISION

MOCO EXHIBIT NO.

CASE NO. 10432

Published by NGPA Section

Oil and Gas Division N.G.P.A. Section P. O. Box 12967 Capitol Station Austin, Texas 78711-2967 512-463-6755

Revised April, 1991

David M. Garlick, Director Oil and Gas Division

### Section 107 Tight Formation Gas

**DEFINITION:** Natural gas produced from a tight formation is produced with difficulty because the rock of the formation has low permeability and flow rates. Production from a tight formation is often termed "unconventional" production because normal completion operations are not usually sufficient to economically produce gas from the formation. Massive fracturing can be required to stimulate production. The designation of a formation creates the economic incentive for drilling which may not otherwise take place.

#### This Section Includes:

A.	Designation of a Tight Formation	D-13
B.	State and Federal Action on Recommendations	D-14
C.	Content of Tight Formation Recommendations	D-15
D.	Tight Formations Approved by FERC	D-17
E.	Tight Formations Awaiting Approval by FERC	D-24
F.	Qualification of Individual Wells	D-24
G.	New Tight Formation Gas Defined	D-24
H.	Recompletion Tight Formation Gas Defined	D-24
I.	Section 107 Tight Formation Filing Requirements	D-26
J.	Section 107 Tight Formation Sample Oath	D-26
K.	Questions and Answers	D-27

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the first of the deepers on this category is that tight formation gas must be Whataver there is designated ught formation Procedurally, heretore a two step arkess easis vit en qualitying wells under Section 107 tight formation gas. Eirst. the light of matter in which hat well is completed must be designated as a right gas compatible. Here I an april latten must be submitted for each prefindual well.

Designation of a Tight Formation: The federal regulations of Section - 7036 200 stablish is requirements that must be medical ormation of anabity of the designated as tight gas formation

Permeability Estima d average in-stru permeability arraghour the oax

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- 3. Nonassociated Natural Gas: Wells completed in the formation are not expected to produce, without stimulation, more than five barrels of crude oil per day. The NGPA defines "crude oil" as a mixture of hydrocarbons that exists in the liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities.
- 4. Infill Drilling Guideline: A formation or any portion shall not be included in the recommendation if the formation or any portion has undergone infill drilling prior to the date of recommendation and the state agency has information which indicates that such portion can be developed absent the incentive price. Infill drilling exists when the formation or portion thereof is considered substantially developed subject to requirements respecting well spacing or proration units, and the requirements were amended by the state agency to provide for smaller proration units for more effective and efficient drainage of the reservoirs in the formation.

Additionally, Section 271.703(c)(2)(ii) allows the consideration of a formation for designation when the permeability exceeds  $0.1\,$  md but the formation exhibits low permeability characteristics. The jurisdictional agency must make an adequate showing of both of two facts. The agency must show that the formation exhibits low permeability characteristics and that the price established for tight formation gas is necessary to provide reasonable incentives for production of the natural gas from the recommended formation due to the extraordinary costs associated with such production.

State Action to Recommend a Formation: An applicant may request a tight formation determination by submitting a written request to the NGPA section of the Oil and Gas Division that a named formation or a specific portion thereof is a tight formation. The applicant must submit the names and addresses of all first purchasers, as indicated on current commission records, from all wells (regardless of operator) within the specific portion of the named formation and all operators in the same field or fields involved. RRC staff will mail a notice of application to all parties. If the technical staff is satisfied with the data submitted with the application, (see Content of the Recommendation Compiled) and if no protest is filed within 21 days of the notice, the application will be presented to the Railroad Commission for approval of the recommendation. If the technical staff is not satisfied with the data submitted, or if a protest is filed within the 21-day notice period, the applicant may request a hearing to consider the application. Any such hearing shall be held only after at least ten days notice to all affected persons. If no protestant appears at the hearing, the application will be presented to the Railroad Commission for approval of the recommendation if the application and any evidence presented at the hearing establishes that the subject formation meets the prescribed requirements for a tight formation determination. A Railroad Commission tight formation determination is not final for NGPA purposes until after FERC finalization. Individual well filings for a determination that natural gas from the wells is being produced from a designated tight formation will not be forwarded to the FERC until after the subject tight formation determination is final for NGPA purposes.

Federal Action to Designate a Formation: FERC action on tight gas determinations begins upon receipt of the determination from the jurisdictional agency. A determination submitted to the FERC shall become final 45 days after the date on which the commission received notice of the determination from the jurisdictional agency. (See §275.202 of the Federal Regulations.)

<u>Content of the Recommendation Compiled:</u> The content of the recommendation forwarded to FERC from Texas is composed of very specific requirements listed in the regulations concerning tight gas formation designation. The extent of the data depends upon the size and geology of the formation, but each recommendation must contain the following basic information.

1. Geography and Geology: The applicant must provide a geographical and geological description. Geographic data should include a map showing the geographic limits of the formation, naming counties involved, describing boundaries, including abstract numbers and survey names, listing fields and/or outlining the area of concern. It is often helpful for the applicant to provide a map showing all data points. Be as precise as possible.

The geological data should include a structure map showing the top contour of the formation, a regional cross-section to determine upper and lower limits of the formation, and some depositional history. It can also be helpful to provide information to the Railroad Commission about the lithology or rock composition of the formation.

2. Supporting Data: Applicant must provide the appropriate engineering and geological data to support the technical guidelines. In-situ permeability data can be obtained from pressure buildup (PBU) analysis, from core analysis (routine permeability which is converted to in situ permeability by calculating or by applying reservoir conditions to the core) or from flow test. Prestimulation flow rate data can be obtained from either a 4-pt. calculated absolute open flow (CAOF), or a 1-pt. CAOF.

Data should be provided on any liquids which are produced. If liquid (oil, condensate, water) is produced during the prestimulation testing, data should be submitted showing the properties of the fluid. Such data would include the gravity at standard conditions, the volume being produced, the gas/oil ratio, the bottom-hole temperature, and the bottom-hole pressure.

- 3. <u>Producing Wells:</u> Applicant should provide a map or list of the wells that are currently producing in the subject formation.
- 4. Fresh Water Protection: The applicant must address the issue of whether any fresh water aquifers that are or are expected to be used as a domestic or agricultural water supply will be adversely affected by designating the tight formation. Therefore the depth of the deepest fresh water aquifer in this formation should be given. Applicant can submit copies of letters from the Texas Department of Water Resources signifying the depth to which fresh water must be protected in the subject area.

# STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION P.O. BOX 2088 SANTA FE, NEW MEXICO 87504

#### SPECIAL RULES AND PROCEDURES FOR TIGHT FORMATION DESIGNATIONS UNDER SECTION 107 OF THE NATURAL GAS POLICY ACT OF 1978

Amended 1/92

#### A. General

Applications for tight formation designations under Section 107 of the NGPA and applicable FERC rules and regulations shall be accepted by the Division at its Santa Fe, New Mexico office after June 30, 1980. These special rules apply only to individual tight formation designations and to not apply to individual well filing requirements for price category determination.

#### B. Definitions

- 1. "Crude oil" means a mixture of hydrocarbons that exists in liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separation facilities.
- 2. "Division" means the Oil Conservation Division of the Energy, Minerals and Natural Resources Department of the State of New Mexico.
- 3. "FERC" means the Federal Energy Regulatory Commission.
- 4. "USBLM" means the office of the United States Bureau of Land Management in Albuquerque, New Mexico.
- 5. "Formation" means any geological formation or portion thereof described by geological as well as geographical parameters which is the subject of a tight formation designation application.
- 6. "Infill drilling" means any drilling in a substantially developed formation (or a portion thereof) subject to the requirements respecting well spacing or proration units which were amended by the Division or the Oil Conservation Commission

NMOCD Exhibit No. 8 January 9, 1992 CASE NO. 10432 after the formation (or portion thereof) was substantially developed and which were adopted for the purpose of more effective and efficient drainage of the reservoirs in such formation. Such amendment may provide for the establishment of smaller drilling or production units or may permit the drilling of additional wells on original units.

#### C. Procedure

- 1. All applications for tight formation designation in the State of New Mexico, which contains state and/or fee lands in any proportion shall be filed with the Division.
- 2. Any application for tight formation designation in the State of New Mexico which contains Federal and/or Indian lands in any proportion shall be concurrently filed with the USBLM. Any application containing lands entirely administered by the federal government shall be filed <u>only</u> with the USBLM.
- 3. Upon receipt of an application for the designation of a tight formation which involves both the Division and USBLM, it will be determined after preliminary review of the subject filing which agency is the most appropriate to sponsor said filing and submit same to the FERC.
- 4. Proof of publication must be submitted with the application. Such proof shall consist of a copy of the legal advertisement which was published in the county or counties covered in the proposed tight formation area. The contents of such advertisement shall include:
  - a. the name, address, phone number and contact party for the applicant;
  - b. the legal description of the proposed area, amount of acreage contained in said area and percentages of land types within said area;
  - c. name of formation or formations to be included and pool names if applicable;
  - d. a notation that any interested party must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico, 87504, within twenty days from the date of publication.
    - NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTIFICATION HAS BEEN SUBMITTED.
- 5. If no objection is received within twenty days following the receipt of a complete application, the application may be approved administratively.

- 6. If a written objection is received within twenty days after receipt of a complete application or if a hearing is deemed advisable by the Division Director, the application shall be set for hearing and notice thereof given by the Division.
- 7. The application shall include a complete set of supporting exhibits (i.e. -- maps, plats, cross-sections, type logs, engineering data, reservoir analyses, core analyses, calculations, pressure information, publications, etc.) together with a statement of the meaning and purpose of each exhibit shall be submitted to the Division and if applicable to the USBLM. These exhibits shall cover all aspects of the required evidentiary data described in Section D below.
- 8. An oath statement shall accompany the application signed by each participant and notarized as to the accuracy and interpretation of the application.
- 9. Three complete additional sets of exhibits, statements, and oath statements must accompany the application; these additional items will be forwarded to the FERC by either the Division or USBLM, together with the Division's recommendation either in the form of an administrative order or letter to the FERC filed by the USBLM.
- 10. Further, it may be necessary for the applicant to submit additional data and/or supplement the original application with additional supporting statements and/or data. The applicant shall be responsible for submitting the required number of copies to complete the application for final approval by the FERC.
- 11. At the request of the USBLM or the Division, a meeting with the applicant may be necessary so that additional inquiries or questions of the filing may be addressed.

#### D. Evidence

- 1. Evidence offered by an applicant shall include:
  - a. a land plat or lease map which clearly indicates the land types (state, fee, federal, and/or Indian) and amounts and percentages for each;
  - b. a map and geographical and geological descriptions of the area and formation for which the designation is sought;
  - c. geological and engineering data to support the application;
  - d. a map or list which clearly locates or describes wells which are currently producing oil or gas, or both, from the formation within the geographical area of the formation;

- e. a report of the extent to which an applicant believes existing state and federal regulations will assure that development of the formation will not adversely affect or impair fresh water aquifers (during both hydraulic fracturing and waste disposal operations) that are being used or are expected to be used in the foreseeable future for domestic or agricultural water supplies;
- f. if the formation has been authorized to be developed by infill drilling prior to the date of recommendation, information and data demonstrating that the formation cannot be developed without the incentive price established in 18 CFR §271.703(a); and,
- g. any other information which the Division and/or BLM may require.
- 2. Evidence shall be based on each of the following geological and engineering guidelines:
  - a. the estimated average <u>in situ</u> permeability, throughout the pay section, is expected to be 0.1 millidarcy or less;
    - (1) Permeability may be established and demonstrated by any customary or acceptable methods, techniques, or testing acceptable in the oil and gas industry.
  - b. The stabilized production rate, either at atmospheric pressure or calculated against atmospheric pressure, of wells completed for production in the formation, without stimulation, is not expected to exceed the production rate determined in accordance with the following table:

n -	If the average depth to the top of the formation (in feet):		
Exceeds	but does not exceed	production rate (in MCF/day may not exceed:	
0	1000	44	
1000	1500	51	
1500	2000	59	
2000	2500	68	
2500	3000	79	
3000	3500	91	
3500	4000	105	

If the average depth to the top of the formation (in feet):		The maximum allowable production rate (in	
Exceeds	but does not exceed	MCF/day may not exceed:	
4000	4500	122	
4500	5000	141	
5000	5500	163	
5500	6000	188	
6000	6500	217	
6500	7000	251	
7000	7500	290	
7500	8000	336	
8000	8500	388	
8500	9000	449	
9000	9500	519	
9500	10000	600	
10000	10500	693	
10500	11000	802	
11000	11500	927	
11500	12000	1071	
12000	12500	1328	
12500	13000	1432	
13000	13500	1655	
13500	14000	1913	
14000	14500	2212	
14500	15000	2557	

c. No well drilled into the recommended tight formation is expected to produce, without stimulation, more than five barrels of crude oil per day.

- d. if an application meets the guidelines contained in subparagraphs 2.b. and 2.c. above, but does not meet the guidelines contained in subparagraph 2.a., the applicant may, in the alternative, show that the formation exhibits low permeability characteristics and that the incentive price is necessary to provide reasonable incentive for production of natural gas from the formation due to extraordinary risks or costs associated with such production.
  - (1) An application based on the guidelines outlined in subparagraph 2.d. above shall include data to support the contention that the guidelines contained in paragraph 2.b. and 2.c above are met, and in addition thereto, shall contain:
    - (a) the types and extent of enhanced production techniques which are expected to be necessary;
    - (b) the estimated expenditures necessary for employing those techniques; and,
    - (c) an estimate of the degree of increase in production from use of such techniques together with engineering and geological data to support that estimate.
- e. If the formation or any portion thereof were authorized to be developed by infill drilling prior to the date of recommendation and the Division has information which in its judgement indicates that such formation or portion subject to infill drilling can be developed absent the incentive price established in 18 CFR §271.703(a), then the Division Director shall not include such information or portion thereof in its recommendation.