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STATE OF SOUTH DAKOTA  
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES  
BOARD OF MINERALS AND ENVIRONMENT

\_\_\_\_\_)  
IN THE MATTER OF THE PUBLIC )  
HEARING TO CONSIDER POWERTECH )  
URANIUM EXPLORATION APPLICATION )  
\_\_\_\_\_)

TRANSCRIPT OF PROCEEDINGS

PROCEEDINGS: Wednesday, January 17, 2007;  
1:00 p.m.; 523 East Capitol  
Avenue, Pierre, South Dakota

APPEARANCES:  
  
On Behalf of the Department  
of Environment and  
Natural Resources: MS. ROXANNE GIEDD  
Assistant Attorney General  
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Pierre, SD 57501

On Behalf of Powertech  
USA, Inc.: MR. MAX MAIN  
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Appearing as Intervenors: MS. CHARMAINE WHITE FACE  
MR. HAROLD J. ONE FEATHER  
MR. RICHARD L. FORT  
MS. JANICE LARSON  
MS. SYLVIA LAMBERT  
MS. ALICE FOUR HORNS  
MR. CLIFFORD WHITE EYES  
MR. JOHN PUTNAM

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1 WEDNESDAY, JANUARY 17, 2007

2 MR. SWEETMAN: The meeting will come to order, please.  
3 1 o'clock was the stated time for the public hearing to  
4 consider the Powertech uranium exploration application. I have  
5 appointed Lee McCahren to act as the hearing chair and I'll  
6 turn the gavel over to him.

7 CHAIRMAN McCAHREN: Thank you. Ms. Giedd, would you  
8 explain what's going on.

9 MS. GIEDD: Yes. What we have before the board is an  
10 application for a uranium exploration permit made by Powertech  
11 USA, Inc. There are some procedural matters that we need to  
12 deal with first before we actually get into opening statements,  
13 Mr. McCahren. One thing I wanted to bring up to the board is  
14 the fact that this is the first time that we have ever  
15 considered an application under the uranium exploration  
16 statutes, which is what I just passed out to the board members.  
17 Since these statutes were enacted in 1982, we have not had a  
18 uranium exploration permit application and the statutes and the  
19 procedures are a little bit different than the other mining  
20 permits that the board is familiar with, so as we go along, I  
21 will be pointing out some of those differences.

22 One of the first differences has to do with the  
23 establishment of parties to the proceeding. Technically of  
24 course the applicant, which in this case is Powertech, is a  
25 party, as is the department. 45-6D-26, which is in the

1 document I just passed out to you, talks about objections and  
2 intervention and it has some rather odd language and I want to  
3 explain how we have interpreted this before I identify the  
4 other parties to this proceeding. What 26 says is that any  
5 person has the right to file written objections to or  
6 statements in support of an application for a uranium  
7 exploration operation permit with the board. Such material for  
8 intervention shall be filed, so it says you can file objections  
9 and then it calls it material for intervention. I'm not  
10 exactly sure what the legislature had in mind, but our  
11 conservative estimation of what that meant was that the persons  
12 who filed objections or statements in support of the  
13 application were parties and those were petitions to intervene.

14 In this case we received these materials for  
15 intervention from Charmaine White Face, who is here at the end  
16 of the table, from Harold One Feather, who is next to her, from  
17 Richard Fort, who we know.

18 CHAIRMAN McCAHREN: Welcome back.

19 MR. FORT: Hi.

20 MS. GIEDD: From Janice Larson, who is the third  
21 person, Sylvia Lambert, who is at the end, Clifford White Eyes,  
22 the gentleman right there, and Alice -- I can't read my  
23 writing -- Four Horns, thank you, who is right here. In  
24 addition, we have received letters from Lela -- I'm going to  
25 butcher this last name -- C-A-J-C-L-O-G, from Bill Center, from

1 John Putnam and from Keith Andersen, and I don't believe any of  
2 those people are here. You are?

3 MR. PUTNAM: John Putnam.

4 MS. GIEDD: Mr. Putnam is here. Mr. Putnam, we can  
5 squeeze you in at a table up here.

6 MR. PUTNAM: I'm fine here.

7 MS. GIEDD: Technically those people, under our  
8 interpretation, have made motions to intervene. After the  
9 deadline passed for filing these, we received three other  
10 comment letters and so you will need to deal with them if they  
11 are present. And that's Dr. Elston, Clement Holy Eagle and  
12 Jerry Wilson. Are any of those people here? I will assume  
13 that they are not interested in intervening, then, since they  
14 have not shown up. But I would suggest, Mr. McCahren, that the  
15 first step is to deal with the intervention proposals of these  
16 individuals.

17 CHAIRMAN McCAHREN: What's the state's recommendation?

18 MS. GIEDD: We have no objection to their  
19 intervention.

20 CHAIRMAN McCAHREN: Who do you represent, Max?

21 MR. MAIN: I represent Powertech USA, Inc., the  
22 applicant, and with me at the table is Frank Lichnovsky, he's  
23 the chief geologist for Powertech. Also behind me is Dick  
24 Clement, he's the president and CEO of Powertech. Seated next  
25 to Larry Mann on the other side is Richard Blubaugh, who is the

1 vice-president of Powertech.

2 CHAIRMAN McCAHREN: What's Larry Mann doing?

3 MR. MAIN: He represents us in the legislature.

4 CHAIRMAN McCAHREN: Okay. And you, Roxanne, introduce  
5 yourself and who you have here.

6 MS. GIEDD: I'm Roxanne Giedd, I'm a deputy attorney  
7 general for the State of South Dakota. I'm representing the  
8 Department of Environment and Natural Resources. With me I  
9 have Marc Macy, who is a staff person in the department. Also  
10 do you want me to introduce everybody from the department?

11 CHAIRMAN McCAHREN: Sure.

12 MS. GIEDD: Mr. Townsend, the head of the mining  
13 program, is here, and Mr. Cepak. Who else do we have? I'm  
14 blanking.

15 MR. HOLM: Eric Holm.

16 MS. GIEDD: Eric Holm and Roberta and that's it.

17 CHAIRMAN McCAHREN: Thank you.

18 MR. FORT: Mr. Chairman.

19 CHAIRMAN McCAHREN: Mr. Fort.

20 MR. FORT: If it's in order, I presume it is, for the  
21 record, I am Richard Fort. I represent myself for this hearing  
22 and of course I am one of the intervenors. I should like to  
23 present a motion and if I get a second for that, I would like  
24 to speak to it. Specifically my motion is that this hearing be  
25 continued until after approval of the in-situ mining

1 regulations, which we are scheduled to take up tomorrow.

2 CHAIRMAN McCAHREN: Why?

3 MR. FORT: If --

4 MS. WHITE FACE: I second.

5 CHAIRMAN McCAHREN: No, no, no. We do the moving and  
6 seconding. But I like the forum. Why do you want to have it  
7 continued?

8 MR. FORT: I would like to talk to that, if I may.

9 CHAIRMAN McCAHREN: Do it.

10 MR. FORT: Maybe at a little bit of length, if you  
11 don't mind.

12 CHAIRMAN McCAHREN: Sit down.

13 MR. FORT: Actually, I have three arguments I'd like  
14 to give for this continuance. First of all, I think that -- I  
15 know Roxanne, I talked with her and she's undoubtedly going to  
16 tell you that mining and exploration are not the same thing,  
17 and I certainly cannot disagree with that. However, I think  
18 you have to say that exploration as it now exists, and I  
19 include the uranium regulations on exploration, which have  
20 never been applied, those were conceived in relation to an  
21 older type of mining that you are all familiar with, of course  
22 the underground standard techniques or the surface mining.

23 These were not conceived, as Roxanne mentioned, what  
24 was it, in 1982 when these were brought out, these were not  
25 conceived in relation to the prospect of in-situ mining.

1 In-situ mining is new to our state. You do have some  
2 regulations that have been prepared in anticipation of this and  
3 of course we will be taking those up, but you have not taken  
4 them up yet. They are not in operation, they are not  
5 applicable. Any exploration has got to consider what the  
6 existing regulations are. Well, your existing regulations  
7 don't have anything to do with in-situ mining. They have to do  
8 with traditional mining techniques.

9           So I would argue it's very out of order to be taking  
10 up the first step as it were in a mining procedure, which the  
11 exploration is, without having your house in order, with all  
12 the regulations in place. As a matter of fact, I think that  
13 the explorer, the operator, needs to know just what are the  
14 requirements of the regulations, because they are going to have  
15 to take that into account in their exploration. As it is now,  
16 they are going to go by the old standards, which don't have  
17 anything to do with in-situ mining.

18           Now, there's a second factor here. In-situ mining by  
19 its very nature requires some exploration techniques that  
20 aren't required in the traditional methods of mining. For  
21 instance, it becomes very important to know not only just what  
22 your ore body is and what its constituents are, it becomes  
23 important to know what it's in, what is next to it and what are  
24 the rock formations like, do they have cracks, do they have  
25 fissures, is there porous rock there. When you are injecting a



1 solution that will be dissolving uranium, which is not pleasant  
2 stuff if it gets into our water, you had better be taking into  
3 account the nature of the geological formations you are  
4 contending with. By traditional methods of exploration that  
5 includes the old uranium exploration techniques, this is not a  
6 major concern. So I would further argue there that it's out of  
7 order at this point to even be considering an exploration  
8 permit until you have those regulations approved.

9           A second point I would like to make is there is  
10 precedent for this. I know two of you I'm sure, I'm not so  
11 sure about you, Linda, but we date back a while and you will  
12 remember Governor Mickelson I'm sure, and we had the prospect a  
13 long time ago of an influx of surface mining in the Black  
14 Hills. Well, Governor Mickelson instituted a moratorium on  
15 permitting and the reason for that of course, quite simply,  
16 DENR was aware of this, they were on the ball, they were  
17 getting regulations ready, but they weren't ready yet, and so  
18 what did he do? He instituted this moratorium on permitting  
19 until the house was in order and we had everything in order in  
20 the prospect of this new mining.

21           It seems to me that if there was one thing, and we had  
22 some disagreements with him, as we have with you folks, he had  
23 a very excellent relation with the mining industry. I don't  
24 think that anybody in the mining industry had any great  
25 objection to this, that the state should want to have their

1 house in order, that there aren't any questions raised about  
2 their doing things in the right procedure. They saw that as  
3 practical and that it made sense.

4 A third point I would like to make has to do not  
5 with -- it's not perhaps a substantive argument. I mean, the  
6 last thing in the world -- I know you folks, and I have  
7 disagreed with you, but I have never impuned your integrity.  
8 But, you know, you are squeezing this in the day before you are  
9 taking up the kind of mining they plan to do, the regulations  
10 for that. It looks suspicious, it does. It looks like you are  
11 squeezing this in for some purpose or other. Maybe they are  
12 afraid that it will be more costly exploration if those  
13 regulations are in place, who knows.

14 But I know it's just appearance. I think it's  
15 probably just an accident of timing that it's happening this  
16 way, but it looks very suspicious, and I think you have to --  
17 you represent the public in South Dakota. You have to be  
18 concerned with appearances and this doesn't look good. It's  
19 being squeezed in, and what's the rush? Why is there such a  
20 big hurry to get out there and drill those holes? Who wants to  
21 go out there anyway? It's cold out there right now. I suppose  
22 you have to wait a month. Is that a big deal? Get the house  
23 in order before you start the process with an exploration  
24 permit. Thank you.

25 CHAIRMAN McCAHREN: Thank you, Mr. Fort. Ms. Giedd.

1 MS. GIEDD: You want me to respond to Mr. Fort's  
2 motion?

3 CHAIRMAN McCAHREN: Please.

4 MS. GIEDD: I guess I only have a couple of things I  
5 would say. The hearing tomorrow on the rules has to do with  
6 actually mining uranium, the permit process and the permit  
7 requirements for obtaining a uranium mine permit. The permit  
8 application before you today has to do with uranium  
9 exploration. The statutes that govern that are already in  
10 place and these aren't rules, these are actual statutes that we  
11 are talking about and they are in place in SDCL 45-6D.

12 Contrary to Mr. Fort's argument, in 1982 when these  
13 were adopted, in-situ mining was indeed acknowledged and  
14 contemplated and in fact it's in the definition of mining that  
15 appears in 45-6B. In-situ mining is not a new process and it  
16 was contemplated in 1982 when the new uranium exploration  
17 statutes were adopted. These were all adopted as a package,  
18 45-6B, 45-6C and 45-6D was the entire package that was adopted  
19 all at once. So I do disagree with Mr. Fort about in-situ  
20 mining conceptually being new and the uranium exploration  
21 statutes not contemplating that particular provision.

22 Frankly, for uranium exploration, what we are talking  
23 about is going out to a site with drill rigs, drilling a hole,  
24 running tests on the hole, plugging the hole and reclaiming the  
25 drill site and going on to the next one. That is all that is

1 contemplated in a uranium exploration permit. The rules that  
2 are up before this board tomorrow have nothing to do with that  
3 and everything to do with exactly how the eventual mining is  
4 done, but they are truly two separate processes. With that,  
5 the department does not take position on a continuance.

6 CHAIRMAN McCAHREN: Mr. Main.

7 MR. MAIN: Thank you, Mr. Chairman. Roxanne is  
8 exactly right. 45-6B does cover in-situ recovery. It  
9 expressly, the definition expressly covers it. The rules that  
10 you are considering tomorrow are to flesh out and add to the  
11 statutory scheme that's already in place. You are not changing  
12 any statutes, you are adopting rules that you are authorized to  
13 do, and those rules will deal with in-situ recovery, not  
14 exploration at all. Nothing to do with exploration.

15 Powertech is here ready to proceed. We have got our  
16 witnesses here. It isn't like this is some rush to a hearing.  
17 Powertech started this permitting process five months ago and  
18 it has worked with the department to arrive at agreed upon  
19 conditions and a surety amount, so Powertech is ready to  
20 proceed and would be prejudiced by any continuance.

21 CHAIRMAN McCAHREN: Got a response, Mr. Fort?

22 MR. FORT: Yes, I do. First of all, I would repeat,  
23 what's the hurry? One month, you can take that up to your next  
24 meeting. Why does it have to be right now? And in regard to  
25 the provisions, now, I've gone through the in-situ, proposed

1 in-situ mining regulations. Quite clearly, they are about  
2 water management and there's a great deal in there that shows  
3 an awareness of potential problems, potential problems that  
4 proper exploration might help to avoid. The present, and I  
5 include the present uranium exploration, I don't think in-situ  
6 mining was that much of a reality in the mines. They didn't  
7 have any awareness of the history of that which we now have.  
8 There was a lot they didn't know at the time they put those  
9 together. I can't see why there has to be such a rush to go  
10 ahead with this when it could be done, let's say, a month from  
11 now and there is no question if your house is in order.

12 Charmaine.

13 CHAIRMAN McCAHREN: Just a second. His question is  
14 what's the rush? Mr. Main.

15 MR. MAIN: Powertech is a publicly-traded company. It  
16 needs to continue to proceed forward as it's represented to the  
17 public that it's doing. A delay of a month many times results  
18 in a delay of another month and another month. I don't know  
19 that the board is going to adopt rules tomorrow or if it's  
20 going to continue the hearing for another month. Powertech has  
21 located in South Dakota, has offices in Hot Springs, is ready  
22 to go. I can't tell you that we would be drilling tomorrow,  
23 but the weather is good and they need to commence operations.  
24 A delay is a frequent tactic.

25 CHAIRMAN McCAHREN: If the exploratory permit were

1 granted, when would it become effective, immediately?

2 MR. MAIN: Under statute, any action of the board does  
3 not become effective until a delay of 10 days. Powertech will  
4 need to submit its letter of credit for the surety. We should  
5 have that by either the end of this week or the first part of  
6 next week, and it cannot -- under the conditions as agreed to,  
7 Powertech could not begin operations until that surety was  
8 posted, but that will still be within the 10-day statutory  
9 period that delays effectiveness of the board action.

10 CHAIRMAN McCAHREN: If the rules were adopted, when do  
11 they become effective, Ms. Giedd? I once knew myself, but I  
12 need reminding.

13 MS. GIEDD: I can't give you an exact time frame. It  
14 is in the range of two to three months after this board -- if  
15 the board would adopt them tomorrow and sign off, it still has  
16 to go to the legislative rules committee and there's all sorts  
17 of filings that have to be done, so it's at least two to three  
18 months I think probably is an estimate.

19 CHAIRMAN McCAHREN: After they are filed, there is  
20 another delay period and I was trying to remember myself, but  
21 it's two to three months. Board members. Charmaine. For the  
22 record, I got your -- just a minute here. I got your letter  
23 yesterday and it came by certified mail where you want a  
24 continuance, and Mr. Fort is speaking, but I assume he's  
25 speaking on behalf of all the intervenors or intervenors to be.

1 Is that okay with you?

2 MR. FORT: I hope so.

3 CHAIRMAN McCAHREN: Thanks. Proceed.

4 MS. WHITE FACE: Well, for the record, then, since you  
5 brought this up, this letter of continuance I asked for, this  
6 request is being submitted to you as you have been appointed to  
7 act as hearing chair by the State of South Dakota Board of  
8 Minerals and Environment, Department of Environment and Natural  
9 Resources in matter of Powertech USA, Inc., uranium exploration  
10 permit application and are authorized to make prehearing and  
11 evidentiary rulings. The hearing is scheduled for Wednesday,  
12 January 17th, 2007. We respectfully request a continuance of  
13 the hearing on the Powertech USA, Inc., uranium exploration  
14 application to a later date.

15 Defenders of the Black Hills is a nonprofit  
16 corporation of volunteers which operates primarily on donations  
17 and small project specific grants. We do not have funds for  
18 legal fees but feel an injustice would occur to our membership  
19 should we not be able to be represented by legal counsel at the  
20 above-named hearing. We have approached several attorneys and  
21 are waiting to hear their responses to our requests for  
22 assistance. We hope you will seriously consider our request  
23 for a continuance due to the need of legal counsel. Thank you  
24 for your consideration in this matter.

25 It's signed by me and it was dated January 12th and it

1 was signed by me because I am the coordinator for Defenders. I  
2 want that entered for the record. I would really hope the  
3 board would consider doing a continuance so that we could be  
4 represented and that was in the processes that we received.  
5 The processes for this hearing that we received said that I  
6 could not, as the coordinator for Defenders, Defenders had  
7 to -- the corporation had to be represented by an attorney and  
8 that I could not represent the Defenders of the Black Hills,  
9 although this is something that I will bring up later in my own  
10 testimony. But I'm glad you brought this up, that I did send  
11 you this. I tried to fax it, I tried to call you last week,  
12 but I couldn't get ahold of you, that's why I had to send it.

13 CHAIRMAN McCAHREN: I moved offices and some of the  
14 phone numbers got abandoned. Did you get a copy of her letter,  
15 Mr. Main?

16 MR. MAIN: I did not.

17 CHAIRMAN McCAHREN: Roxanne will give you one. I  
18 didn't know of you when I got it, so I had it sent to Roxanne  
19 and to Mr. Sweetman. If I had known of you, I would have had  
20 it sent to you. But it's just what she read to you.

21 MS. WHITE FACE: But I wanted to respond to what Mr.  
22 Fort said and also to some of the other responses because we  
23 are also preparing to come tomorrow to the hearing on the  
24 regulations. And in the regulations, it speaks to the issue of  
25 an application, a mining application, and just for example, in



1 Section 74:29:11:23, it talks in section F, it says the permit  
2 application must include a leakage response plan detailing  
3 actions that will be taken in response to the detection of  
4 liner system leakage, including notification regarding  
5 monitoring and repair.

6 CHAIRMAN McCAHREN: This woman is trying to take it  
7 down. You gotta slow up a little. Carla is the poor woman I  
8 referred to.

9 MS. WHITE FACE: I'll try to slow down. So that we  
10 agree with Mr. Fort's position and it's not in just existing  
11 laws, it's also going to be in the regulations that you are  
12 going to be considering tomorrow, and so again, I just wanted  
13 to let you know that it is in the regulations you will be  
14 considering tomorrow, this application procedure. Thank you.

15 CHAIRMAN McCAHREN: Thank you. Anybody else to speak  
16 on the subject at hand? Board members. We have two requests.

17 MR. DeMERSSEMAN: You may proceed if there are others.

18 CHAIRMAN McCAHREN: Ma'am.

19 MS. LAMBERT: I'm not sure --

20 CHAIRMAN McCAHREN: You have to identify yourself for  
21 the court reporter.

22 MS. LAMBERT: I'm Sylvia Lambert. I have several  
23 things. Under the heading of -- on the Web site of South  
24 Dakota Department of Environment and Natural Resources, it says  
25 protecting South Dakota's tomorrow today, and that's what I'm

1 here for. I'm concerned. You mentioned that the in-situ leach  
2 mining is an old thing. However, in the definitions for  
3 tomorrow's program, number 51 is underlined as a new one, so I  
4 noticed in that this in-situ leach mining is a totally new  
5 proposed chapter, Chapter 74:29:11 in South Dakota under mine  
6 land reclamation. There are now 119 definitions, 64 of these,  
7 plus 10 subsections are new. That's well over half. So I  
8 believe that the in-situ mining permit should not be granted at  
9 this point.

10 In your proposal, you do mention things about  
11 restoration of land, for example, in comments like "as nearly  
12 as possible," quoting, "that to the extent possible," but there  
13 isn't anything about restoration of water. And none of South  
14 Dakota's new ground water restoration demonstration, which is  
15 74:29:11:05, appears in Powertech's reclamation plan. I am  
16 concerned.

17 The Board of Minerals and Environment is responsible  
18 for air quality, but I notice that not water quality. I'm not  
19 sure how this works, but what I see is that there's a separate  
20 ground water quality program and I believe that that program  
21 with the hydrologist should submit a full environmental impact  
22 statement or review to assess the potential impacts from such  
23 an environmentally destructive activity as ISL mining, things  
24 like aquifer description, present uses and so forth and the  
25 water quality, various surface water, ground water, pathway and

1 fate analysis, excursion movement, effluent discharge  
2 information. In addition to that, you have six domestic wells  
3 that have been sampled and tested. The analytical results  
4 report is marked confidential. Why? The public needs to know,  
5 everybody needs to know what that is. I think maybe you  
6 folks -- Powertech is originally from Colorado or Canada, I'm  
7 not sure.

8 MS. GIEDD: Excuse me, Mr. Chairman, it sounds to me  
9 like this is seriously getting into the substance, and  
10 certainly the intervenor can discuss these issues as we get  
11 there, but right now we have a motion for a continuance in  
12 front of you and we need to deal with that first and then come  
13 back to the substantive issues.

14 MS. LAMBERT: So continuance?

15 CHAIRMAN McCAHREN: Yes.

16 MS. GIEDD: I do have a response to make on the motion  
17 for a continuance, if I may.

18 CHAIRMAN McCAHREN: You may.

19 MS. GIEDD: One of the issues raised has to do with  
20 again the regulations that are up before you tomorrow, and  
21 discussion was made of some of the requirements of a mine  
22 permit, a uranium mining permit application under those  
23 regulations. That is a distinct and different thing than a  
24 uranium exploration permit application. This proposal, this  
25 application that's in front of you today, even if you adopt

1 those regulations tomorrow and this were filed or continued,  
2 would not come in and would not have to comply with those  
3 regulations because they deal with the mining permit  
4 application, not the exploration permit application. And I  
5 just believe that it sounds to me like there is some confusion  
6 between the two.

7           There are two distinct operations and so the rules  
8 hearing, even if you adopted all those changes and this permit  
9 came after the rules hearing, this permit application is not  
10 filed under those new regulations, and I just wanted to clarify  
11 that for the record. Thank you.

12           CHAIRMAN McCAHREN: Thank you. Mr. Sweetman.

13           MR. SWEETMAN: Procedurally, I'm not quite clear of  
14 where we stand.

15           CHAIRMAN McCAHREN: I understand. I had some concerns  
16 in this regard also and I called and I talked to Mr. Townsend,  
17 who was previously introduced, and he basically told me at  
18 greater length what Roxanne just said, which is that the  
19 exploration is under a different section than the mining, which  
20 hasn't been adopted yet, and we handle other types of mining,  
21 and I knew what he was talking about, as far as exploration is  
22 concerned. So what does the board want to do?

23           MR. MONSON: Correct me if I'm wrong, because after  
24 listening to this, the concerns that I hear don't have to do  
25 with the exploration, they have to do with the mining, because

1 I'm not quite aware what the concerns are about the  
2 exploration -- excuse me, the exploration technique. Is that  
3 an issue that we are talking about today?

4 MR. FORT: Could I say something?

5 MR. MONSON: Please do.

6 MR. FORT: I really have to disagree with Roxanne on  
7 assuming that exploration and mining are two totally separate  
8 things. I cannot believe that an explorer, who is exploring to  
9 mine, does not take into account the kind of mining he's going  
10 to do. I mean, that's what he's doing the exploring for. He's  
11 gotta prepare for a certain kind of mining. We don't have the  
12 regulations for the kind of mining they are going to be  
13 exploring for.

14 MR. MONSON: Right, but if I understood correctly,  
15 there is a procedure in place that has been approved for the  
16 type of exploration procedure, correct?

17 MR. MAIN: Yes.

18 MR. FORT: Yes, there's uranium exploration, but those  
19 weren't done -- were done in 1982 and a lot has been learned  
20 since then and there is not an awareness of all the problems  
21 that are potential there. Once again, I have to repeat two  
22 things. To totally separate exploration from mining is  
23 unrealistic. You are just inventing a distinction that isn't  
24 real. And secondly, what the hell is the hurry?

25 MR. MONSON: What's the sense in waiting if the

1 procedure for exploration is not going to be changed tomorrow?  
2 Nothing is going to be approved for exploration.

3 MR. FORT: It will have to be. When those regulations  
4 are in place, they will have to be considered when they mine.  
5 For instance, I gave you the example of cracks and fissures and  
6 porous rock. What do you care about that when you are  
7 exploring for gold? You want to know where your ore body is  
8 and what it's made up of. What do you care about whether there  
9 are cracks and fissures in the ore body? You don't have to be  
10 concerned with that. And the old regulations on uranium don't  
11 adequately address that problem and so I repeat those are not  
12 separable things, exploration and mining are not separable and,  
13 again, I keep saying this, why are you in such a rush?

14 MR. MONSON: What's wrong with the procedure of  
15 exploration as it's written? What's inadequate with the  
16 procedures for exploration?

17 MS. WHITE FACE: I think you are getting into the  
18 substantive part of the argument and if we are ready for that,  
19 we can go, but we are still on this continuance as far as I  
20 know.

21 MS. GIEDD: Certainly I expect, sir, that during the  
22 course of Powertech and the department presenting evidence, the  
23 intervenors will indeed be raising what they think is missing  
24 and what's wrong from the substantive requirements for uranium  
25 exploration.

1 MR. FORT: That's true.

2 CHAIRMAN McCAHREN: Identify yourself.

3 MR. ONE FEATHER: My name is Harold One Feather and I  
4 kind of like reading historic documents and stuff like that,  
5 that's perhaps what I'm best at. And like I've seen those --  
6 you already have drilled 4,000 holes, that's according to  
7 Powertech, wherever they got the data from. I kind of think  
8 it's from this thing they call a National Uranium Resource  
9 Evaluation, plus all their ground water tests they did in Fall  
10 River County in '75 and the uranium exploration days in the  
11 fifties, sixties and seventies. They already drilled all kinds  
12 of holes back then for oil and gas and everything. Why aren't  
13 they using that data? Then why drill more holes? Then they  
14 can try for the mining permit. What is the purpose for these  
15 holes, for this license, if we don't have the mining regs up?  
16 It's like a cart before the horse.

17 They are both -- they are not inseparable, one event  
18 causes the other. If they didn't have the exploration, they  
19 know that uranium is out there, everybody knows that, but my  
20 whole perspective is they are like coming here and pushing  
21 everybody around, you know, pushing. We gotta get this done,  
22 we gotta get this done. We got tons of data. How come they  
23 are not using the data from before? What's wrong with that?  
24 Were those tests all wrong? Were all the 4,000 plus holes dug  
25 out there in that area just for naught, an exercise in making

1 more reports and documents to be shelved, no one ever uses them  
2 ever again? It seems like it's just a big waste of time to be  
3 doing this over and over.

4           There are holes out there. There is uranium out  
5 there. That's what I've been saying all along, it's just like  
6 they are pushing, pushing. I didn't even know about -- I heard  
7 about this a few months ago, but I thought it was going to be  
8 energy metals that were going to be -- that we were going to be  
9 arguing up here and all of a sudden where did Powertech come  
10 from?

11           Last year I heard about energy metals and that  
12 Torrigan and Stratworth, you know, but then all of a sudden  
13 Powertech comes out of the blue and here they are pushing the  
14 state, and not very many people know what ISL mining is, not  
15 very many people know of the problems with ISL mining. Not  
16 very many people -- it's like, let's get this all done in one  
17 week and we will be done with it and that's it. That's why the  
18 people gotta know. Otherwise we will end up having another  
19 accident like Brohm or all the other different accidents you  
20 had out there, Cave Hills, where the money is good, but it  
21 seems like when the money runs out, so does the companies.

22           You gotta slow down, that's the whole thing. People  
23 gotta know. Like I said, I didn't know about this until just a  
24 couple months ago. But then I started looking into it and then  
25 I seen all this other -- they already drilled all kinds of



1 holes back there. Couldn't they use that data for whatever  
2 purposes and then try for the permit?

3 MS. GIEDD: Mr. Chairman, the question raised by Mr.  
4 One Feather with regard to the past data, I think that will be  
5 answered during the course of this hearing.

6 CHAIRMAN McCAHREN: I'm aware of that.

7 MS. GIEDD: And I just wanted to point that out, that  
8 we can't answer it now, but we will try to answer it during the  
9 course of the hearing.

10 CHAIRMAN McCAHREN: Most of the questions will be  
11 addressed in the hearing and you will have a chance to ask  
12 people questions, too.

13 MS. HILDE: Mr. Chairman, it's my understanding that  
14 if we proceed with the hearing and all the substantive issues  
15 are aired, that the board could determine at that time whether  
16 to vote or whether to delay. So I think since we are getting  
17 into substantive issues, I think we should move into the  
18 hearing so that people have an opportunity to get these issues  
19 out, because there's always the opportunity for the board to  
20 determine at a later time that the final decision will not be  
21 made now.

22 CHAIRMAN McCAHREN: You are moving to proceed with the  
23 hearing?

24 MS. HILDE: I am.

25 CHAIRMAN McCAHREN: Second?

1 MR. MONSON: I'll second.

2 CHAIRMAN McCAHREN: Further discussion.

3 MR. DeMERSSEMAN: Discussion, substitute motion, Mr.  
4 Chairman. The only thing that these statutes govern right now  
5 is an attempt to identify the mineral, the product, its  
6 identification. A lot of these arguments that I hear have to  
7 do with the solution and separation, which are not part of the  
8 identification, and we can decide to postpone later, if you  
9 choose, but I would deny any motion for a continuance. We can  
10 decide whether or not we want to vote at the end of today or  
11 not. But I think we should proceed.

12 The people are here, I want to hear what they have to  
13 say and it's my understanding from the statutes and having  
14 served on the legislature, whatever you do tomorrow, whether  
15 it's these guys or anybody else or the people that are right  
16 across the border in Crook County, Wyoming, they are going to  
17 be bound by the same regulations, when they become effective.  
18 After all the hearings here, you have the interim rules  
19 committee that everybody can appear at also. So I would --

20 MS. HILDE: My motion was to proceed.

21 MR. DeMERSSEMAN: Oh, to proceed in --

22 MS. HILDE: To proceed with the hearing.

23 MR. DeMERSSEMAN: Would that constitute a denial of  
24 the --

25 MS. HILDE: I didn't say proceed and deny, I said

1 proceed and I explained that our process would allow us to make  
2 those choices.

3 MR. DeMERSSEMAN: Okay.

4 MR. FORT: Mr. Chairman.

5 CHAIRMAN McCAHREN: Just a minute, Mr. Fort. Have you  
6 completed?

7 MR. DeMERSSEMAN: I'm through, sir. My substitute  
8 motion would be a denial of any continuance of this time to  
9 proceed. We can still decide at the end to vote or not.

10 MR. SWEETMAN: That's what she said.

11 MR. DeMERSSEMAN: If that's what Linda said, then I  
12 withdraw.

13 CHAIRMAN McCAHREN: All those in favor of the motion  
14 to proceed, say "aye."

15 (All board members voted "aye.")

16 CHAIRMAN McCAHREN: Motion carried. We are going to  
17 proceed. That means that your motion is denied, Mr. Fort.

18 MR. FORT: Yes. I would argue that you were out of  
19 order.

20 CHAIRMAN McCAHREN: I am just telling you what's  
21 happening.

22 MR. FORT: You should have voted on my motion, you  
23 never did.

24 CHAIRMAN McCAHREN: We just did, and also on your  
25 motion, too. We just voted really because we are going to

1 proceed. Now, we got some logistical problems here because  
2 does anybody have a list of the intervenors?

3 MS. GIEDD: I do.

4 CHAIRMAN McCAHREN: Could I have a copy?

5 MS. GIEDD: I will write them down and give them to  
6 you. Do you want me to read them or do you want me to write  
7 them down?

8 CHAIRMAN McCAHREN: If it gets into cross-examination,  
9 I need to know who to call on to address.

10 MS. GIEDD: I'll make a list for you right now.

11 CHAIRMAN McCAHREN: Do you want to make an opening  
12 statement, Mr. Main?

13 MR. MAIN: Briefly.

14 CHAIRMAN McCAHREN: Bye, Mr. Mann.

15 MS. GIEDD: Mr. Chairman, will you be giving the  
16 general public nonintervenors a chance to make comments on this  
17 or will you be proceeding directly to the hearing?

18 CHAIRMAN McCAHREN: Usually we do. But I don't know  
19 who is who yet.

20 MS. GIEDD: Okay.

21 CHAIRMAN McCAHREN: So you should all be preparing to  
22 say something in case it comes up pretty quick. While she's  
23 writing, I'll tell you what's going to happen. She's going to  
24 give me a list of the intervenors. Because this is a formal  
25 proceeding, we have cross-examination of witnesses.

1 Intervenor are entitled to ask questions and I gotta have a  
2 list to try to keep track of whose turn it is. But before that  
3 starts, consistent with our past practice, anybody who wants to  
4 speak to this issue can do so before we start the formal  
5 proceeding. If you speak, that means you are not part of the  
6 formal testimony. That means you can't be called as a witness  
7 and respond and participate in the formal part of the hearing.  
8 Does everybody understand what I'm talking about? So if you  
9 are just here and you want to say something, you can do it.  
10 Any questions? You can do it now. Stand up. Tell who you  
11 are.

12 MR. STANDING HIGH: Good afternoon, everybody. My  
13 name is Mato Standing High. For the record, that's M-A-T-O  
14 Standing High, two words. Professionally, I'm an attorney for  
15 the Rosebud Sioux Tribe. However, I'm not here to address you  
16 in that capacity today. I grew up in the Black Hills, I grew  
17 up in Spearfish. I'm a Rosebud Sioux tribal member, so the  
18 Black Hills have a lot more meaning to me than simply dollars  
19 and cents, which I believe this whole issue is about.

20 Growing up in the Black Hills, I have done everything  
21 in the Black Hills, I have rode bikes, I've skied, I've hiked,  
22 cross-country skied, I've done just about anything you can do  
23 in the beautiful Black Hills. Now, again, growing up there,  
24 that means they are special to me not just because of the fact  
25 that they are part of our state, but I grew up there and along

1 with that, my background creates another special meaning for  
2 the Black Hills.

3           That issue has been a long-standing tension between  
4 Indians and non-Indians. I wouldn't be able to begin to sit  
5 here today, it would take me a year to tell you about the  
6 intricacies of that issue, but I think we all know what it  
7 comes down to with the different perspectives is that there's a  
8 difference in those perspectives. I think a lot of mistakes in  
9 the past could have been avoided simply with respect and I  
10 think again that's what this is about. So in all this talk  
11 about dollars and cents and everything else, let's remember  
12 that there's question as to the title to the Black Hills  
13 because of some court cases in the Supreme Court. There's also  
14 some treaty rights in question that nobody seems to be talking  
15 about or addressing.

16           Again, that all has nothing to do with the fact that  
17 the Black Hills is a beautiful place. In my experience on this  
18 earth, I've been all around the United States and the world, I  
19 met a lot of different people and I was proud to say that I was  
20 from South Dakota, proud to say that I was from South Dakota  
21 because we have clean water, we have clean air, we have places  
22 where we can go that nobody else in this nation can enjoy.  
23 Now, we look at New York, we look at Los Angeles, we look at  
24 Houston, we a look at all these major cities in our country and  
25 the world and they are all, we would say they are polluted,

1 they have dirty water, blah, blah, blah, because of population,  
2 but let's look at what we are creating here. We are creating  
3 potential for our state to be polluted in ways we may not even  
4 know about in uranium mining. So let's also keep that in mind.

5           What we have to look at here, and I think it was said  
6 by Mr. Fort earlier, let's not kid anybody here, they are not  
7 doing any exploring to spend the money to explore. They are  
8 exploring to mine and it's already been mentioned there's  
9 already 4,000 holes that have been drilled. What's another  
10 150? Well, there's two sides to that argument. But we are  
11 harming the environment. What about the people? What about  
12 us? What about our water? Is anybody considering that?

13           We need to protect our state. We need to protect our  
14 citizens. We need to protect the Black Hills. So I just would  
15 like to urge the board to keep all those issues in mind and  
16 remember that this is potentially just the beginning of a  
17 battle that could last for a long time, and not only from the  
18 Native American perspective, but by concerned citizens of the  
19 Black Hills. Thank you.

20           CHAIRMAN McCAHREN: Anybody else? The list of  
21 intervenors I have is Charmaine White Face, Harold One Feather,  
22 Richard Fort, Janice Bad Horse Larson, Sylvia Lambert. If you  
23 two would switch places, it would make it easier for me with my  
24 list here. And Clifford White Eyes, Alice Four Horns and John  
25 Putnam. You can move up here, Mr. Putnam, if you want. Or you

1 can stay there.

2 MR. PUTNAM: I'm fine here, if it's okay with you.

3 CHAIRMAN McCAHREN: Those are the people that are  
4 intervenors. An intervenor is a party. An intervenor can ask  
5 questions of witnesses and participate. Any other people are  
6 witnesses or spectators in this matter. We will do the opening  
7 statements. You are first, Mr. Main.

8 MR. MAIN: Thank you, Your Honor, Mr. Chairman. As I  
9 said, I'm Max Main from Belle Fourche and I represent  
10 Powertech.

11 CHAIRMAN McCAHREN: Can you hear in back? Yes and no.  
12 Go over on the stand here maybe and it will help.

13 MR. MAIN: I'm Max Main from Belle Fourche and I  
14 represent Powertech. Powertech USA, Inc., is the applicant.  
15 They are a South Dakota corporation. They are wholly owned by  
16 the Canadian company publicly traded known as Powertech Uranium  
17 Corp. Powertech became active in South Dakota last year, a  
18 little bit before that. They have acquired some interests in  
19 Fall River and Custer County that they would like to explore.  
20 They acquired those interests by leases from mineral owners,  
21 purchases of mineral interests from mineral owners and  
22 purchases of unpatented mining claims.

23 Powertech wants to do its exploration in accordance  
24 with all the laws, rules and regulations and to protect the  
25 environment. And I want to add to what's been stated, but just



1 to make it clear, Powertech has applied for an exploration  
2 permit under the existing statutory law. It's 45-6D. The  
3 rules you consider tomorrow have nothing to do with that  
4 chapter. If you adopted every one of the rules tomorrow  
5 regarding in-situ recovery mining, it won't change the  
6 exploration statutes that Powertech has made its application  
7 under. Powertech's exploration activities will be exactly the  
8 same whether you adopt those rules or not. So the continuance  
9 of the hearing for the board to consider in-situ recovery  
10 mining regulations would not be relevant to the exploration  
11 permit application that's before it now. I just -- others have  
12 said that, I just want that -- I want to reiterate it.

13 Powertech has moved its chief geologist to Hot  
14 Springs. It has opened an office in Hot Springs and it's met  
15 with public agencies, county commissioners in both counties.  
16 Powertech will be environmentally conscious. It's aware of the  
17 concerns that people have regarding even exploration, which is  
18 a fairly minimally intrusive activity, but it's also aware of  
19 the concerns people have regarding in-situ recovery mining.

20 We will try to maintain our focus on that this  
21 application that Powertech has submitted deals only with  
22 exploration. I know there's concerns about mining. If  
23 Powertech's activities proceed to making a mining application,  
24 an in-situ recovery mining application, then those comments and  
25 concerns can all be addressed there. But right now what we are

1 talking about is drilling 155 test holes in Fall River and  
2 Custer County. We aren't talking about mining. Exploration  
3 and mining are two different things.

4 I believe Powertech, and I believe DENR agrees, has  
5 submitted a complete application. We have agreed to the --  
6 Powertech has agreed to the surety amount. Powertech has  
7 agreed to all the conditions proposed by DENR. It's been an  
8 effort on Powertech's part to go the entire distance it has to  
9 go to protect the environment and to cooperate with DENR and  
10 follow all the laws and rules and regulations and we intend to  
11 show that during our evidence. Thank you, Mr. Chairman.

12 CHAIRMAN McCAHREN: Thank you. Ms. Giedd.

13 MS. GIEDD: Thank you, Mr. Chairman. The department  
14 will be presenting a witness who will testify with regard to  
15 the application, how the department's review process worked,  
16 the completeness of the application in terms of its complying  
17 with all the requirements that are in SDCL 45-6D, the surety,  
18 how we calculated the surety, how much the company has to put  
19 into a bond or surety bond in order for them to receive the  
20 application, and we will present evidence concerning all of  
21 those issues that are required by 45-6D.

22 I have already made our position clear with regard to  
23 the applicability of the regulations and so I won't address  
24 that again. The only other thing I want to add is that the  
25 general -- this is not a legislative hearing where we are going

1 to be discussing the policies involved in uranium mining and in  
2 nuclear power development. This is a mining exploration permit  
3 application and it's a very narrow subject and we will try to  
4 constrain the case to that narrow subject. Thank you, Mr.  
5 Chairman.

6 CHAIRMAN McCAHREN: Thank you. Technically, the  
7 intervenors can make an opening statement and I'd allow you to,  
8 but I would just as soon proceed and listen to how the case is  
9 going to come out. Is that okay with everybody? You want to  
10 say something, Dick?

11 MR. FORT: Yeah, I'd like to make a brief statement.

12 CHAIRMAN McCAHREN: I figured you would. Go ahead.

13 MR. FORT: Am I supposed to go over there?

14 CHAIRMAN McCAHREN: Sure.

15 MR. FORT: First of all, I agree with Max Main. All  
16 you are considering here today is the application for  
17 exploration and by the present standards and it has nothing to  
18 do with the regulations that are going to be taken up tomorrow  
19 and those will not be applicable. I find that as an argument  
20 against this exploration. But very simply, I'm against this  
21 exploration permit for two very simple reasons.

22 I have come to the conviction that the in-situ mining  
23 process, regardless of the quality of your regulations, is a  
24 faulty process and it's going to be a danger to water. So on  
25 those grounds, I look at this exploration as the start of that

1 process. I think it's a process that is not in our ultimate  
2 public interest. It's a threat to our water and nothing is  
3 more precious to us than our water.

4           The second point I'd like to make has to do with  
5 uranium production and I know you have been ordered by the  
6 legislature, and what can you do but what they tell you to do,  
7 but I have to tell you that I think it is very foolish to go  
8 into uranium production for power. We don't know at this point  
9 what to do with the aftermath. Those rods will be radioactive  
10 for eons.

11           CHAIRMAN McCAHREN: That's beyond us.

12           MR. FORT: No, it's not. We are talking about uranium  
13 production and this is the start of it in our South Dakota and  
14 in a method that is totally dangerous. For those reasons, I  
15 oppose this exploration.

16           CHAIRMAN McCAHREN: Thank you. Ms. White Face.

17           MS. WHITE FACE: When we get to the substantive part,  
18 then I will talk about why I'm against this exploration permit,  
19 but I wanted to just say a couple more things in this opening  
20 remark about the procedure. For one thing, I also called -- we  
21 were told to call the Department of Environment and Natural  
22 Resources and talk to Mr. Marc Macy if we had any requests.  
23 And in our notification of this hearing, it said that  
24 interpreters would be provided and we do need an interpreter  
25 and so I asked for an interpreter because two of the

1 intervenors, Lakota language is their first language, and one  
2 of them, Lakota language is almost her complete language and so  
3 I asked for Lakota language intervenors. We have how many  
4 tribal colleges in South Dakota where they teach the Lakota  
5 language. It happens to be ironic that today is Native  
6 American Day over at the Capitol and yet our request for a  
7 Lakota language interpreter was denied.

8 I was told that only for the hearing impaired could an  
9 interpreter be given, yet in the notification that we received,  
10 it did not say an interpreter for the hearing impaired, it just  
11 said an interpreter. And so during the proceedings, if, for  
12 example, when two of the intervenors wish to intervene, we have  
13 among our own selves people who can interpret for them. It  
14 will take a little bit of time going back and forth, and I just  
15 wanted the board to be aware of this.

16 Secondly, in the procedure it said that I could only  
17 be presented as an individual, not as a coordinator for our  
18 corporation. However, in the application that was submitted by  
19 Powertech, they submit their application, I, Powertech, which  
20 is a corporation. It gets -- its application is as an  
21 individual, so why can't a corporation also, such as Defenders  
22 of the Black Hills, which is an incorporated nonprofit, a  
23 nonprofit corporation, also be considered an individual? Those  
24 are just two things I wanted for the record and for part of my  
25 opening remarks. But my opening remarks will be to why -- my

1 substantive reasons why this application should not be  
2 approved. Thank you.

3 CHAIRMAN McCAHREN: Thank you. Let's have a short  
4 recess. Then we will proceed with the hearing. Thank you.

5 (Whereupon, the hearing was in recess at 2:02 p.m.,  
6 and subsequently reconvened at 2:12 p.m., and the following  
7 proceedings were had and entered of record:)

8 CHAIRMAN McCAHREN: We will come to order. We will  
9 resume the hearing. Ms. Giedd, will you present the  
10 preliminary matters?

11 MS. GIEDD: We will go ahead and present the  
12 department's case, Mr. McCahren. The department does not have  
13 the burden of proof in this matter, that is on the applicant,  
14 but we will proceed first. We would call Mr. Marc Macy.

15 CHAIRMAN McCAHREN: Ready to be sworn?

16 Thereupon,

17 MARC MACY,

18 called as a witness, being first duly sworn as hereinafter  
19 certified, testified as follows:

20 CHAIRMAN McCAHREN: Proceed.

21 DIRECT EXAMINATION

22 BY MS. GIEDD:

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

24 A. Marc Alan Macy.

25 Q. What is your educational background?

1           A.    I hold a bachelor of science degree in geological  
2 engineering from the South Dakota School of Mines and  
3 Technology.

4           Q.    When did you get that?

5           A.    May 2004.

6           Q.    And whom are you employed by?

7           A.    The South Dakota Department of Environment and Natural  
8 Resources.

9           Q.    And what is your current position?

10          A.    My current position is actually in the air quality  
11 program, but this is in the mining program, I just moved over.  
12 And my duties in the mining program included engineering review  
13 of plans and specifications submitted by mining facilities to  
14 insure engineering adequacy and compliance with state statutes  
15 and regulations. Also conduct inspections of mining facilities  
16 to insure compliance with state statutes and regulations,  
17 handle mine permit issues, technical revisions to mine permit,  
18 small scale mine permit applications and also exploration  
19 applications. I would review testing and sampling data to make  
20 sure that follows South Dakota ground water and surface water  
21 standards and perform other tests as assigned.

22          Q.    Have you attended any conferences in the mining area  
23 since you were employed by the department?

24          A.    Yes, I have. In late April 2006 I attended a uranium  
25 exploration and development conference in Denver and this

1 conference dealt with state and federal permitting regimes,  
2 water quality issues that are associated with uranium  
3 exploration, also state and federal workers safety and health  
4 laws.

5 Q. Are you familiar with the Powertech application for a  
6 uranium exploration permit?

7 A. Yes, I am.

8 Q. And why are you familiar with it?

9 A. I was the lead reviewer of this permit application.

10 Q. And what does the lead reviewer do?

11 A. The lead reviewer handles all correspondence and  
12 application documents that are submitted to the department and  
13 files these accordingly. We set up the meeting and inspection  
14 with Powertech. I was the main author of the inspection  
15 report. Generate documents to be published and work on  
16 attaining figures for the surety calculations.

17 Q. Are you the only person in the department who worked  
18 on the Powertech application?

19 A. No, I was not.

20 Q. And you have prepared a number of overheads to help  
21 present your testimony today, have you not?

22 A. I have.

23 Q. I'm showing you what's been marked as Exhibit A. Is  
24 that a copy of the overheads that you have prepared?

25 A. That is a copy of the overheads.



1 MS. GIEDD: Mr. McCahren, since he hasn't talked about  
2 them yet, I think what I will do is move my exhibits at the end  
3 of Mr. Macy's testimony, if that's okay.

4 CHAIRMAN McCAHREN: It's okay.

5 Q. (BY MS. GIEDD) So, Mr. Macy, tell me who else was  
6 involved with the review of Powertech's application.

7 A. If you care to look up at the screen, we had nine  
8 staff members of the Department of Environment and Natural  
9 Resources.

10 CHAIRMAN McCAHREN: Excuse me, Bob, will you turn  
11 those lights off there, please? Can you see well enough to do  
12 what you are doing?

13 A. Yes, I'm fine. As I was saying, we had nine staff  
14 members with combined experience of 130 years review  
15 Powertech's uranium exploration permit application. We had a  
16 project engineer, Mr. Eric Holm, with 22 years experience,  
17 myself with two and a half years, Roberta Fivecoate with two  
18 and a half years experience, the engineering director of the  
19 mining program, Mr. Mike Cepak, he's a registered professional  
20 engineer.

21 CHAIRMAN McCAHREN: A little slower.

22 A. Sorry. Registered professional engineer in South  
23 Dakota with 20 years experience and also nine years in the  
24 private mining industry. Our administrator, Bob Townsend, he's  
25 a certified professional geologist, also reviewed the permit.

1 In our ground water quality program, we had two senior  
2 hydrologists, both with many years experience, and one of them  
3 a certified professional geologist. The engineering director  
4 from the surface water quality program, who is a registered  
5 professional engineer in South Dakota, and our water rights  
6 program, an engineering specialist, who is the wells expert.

7 Q. (BY MS. GIEDD) And all of these people were involved  
8 with you in reviewing the application; is that correct?

9 A. That is correct.

10 Q. And Mr. Macy, because the board has not handled a  
11 permit application under these statutes, 45-6D, I asked you to  
12 prepare some slides that discuss some of the substantive  
13 statutes that are applicable to this application, did I not?

14 A. Yes, you did.

15 Q. And you have prepared overheads to help you kind of  
16 acquaint the board with some of these statutes, correct?

17 A. That I have.

18 Q. Please proceed with those.

19 A. Well, the items a uranium exploration permit applicant  
20 needs to provide to obtain a permit are listed in state  
21 statute, and I'm briefly going to touch on the main points for  
22 the board. All statutes are given as an exhibit and full  
23 wording of many of these statutes are shown in my PowerPoint  
24 presentation. 45-6D-6 lists the items that comprise the permit  
25 application, which includes the application form, reclamation

1 plan, map, and fee pursuant to state statutes. Seven lists the  
2 contents of the application form, such as the operator's name,  
3 principal place of business, resident agent, brief statement of  
4 the proposed operation, legal description, date of  
5 commencement, authority for the board to inspect the area. The  
6 application form is shown under Exhibit E. Do you guys have --

7 Q. No, we will get to that. Keep going.

8 A. It's shown on Exhibit E in the briefing document.

9 Statute nine lists the contents of the reclamation plan and  
10 states that reclamation of affected lands is mandatory.

11 Contents will include description of the reclamation proposed,  
12 timetable for reseeding, description of how the reclamation  
13 will rehabilitate the affected land, plugging procedure and  
14 estimated cost of reclamation.

15 Thirteen, the Department of Game, Fish & Parks was  
16 notified of the application and was present during the  
17 inspection. They submitted recommendations and these were  
18 incorporated into the department's conditions. Recommendations  
19 are shown under Exhibit I. In the conditions the department  
20 generated, we state that the applicant shall follow all  
21 recommendations from the Department of Game, Fish & Parks.

22 Q. Mr. Macy, we will get to what we actually have in our  
23 briefing book and our conditions later in more detail. Right  
24 now I just want you to talk generally about the statutes to  
25 acquaint the board with the legal scheme, if you will.

1           A.     Okay, thank you. Fourteen, the state archaeologist  
2 was notified of this permit application but was unable to  
3 attend the inspection and we will get to this later on in my  
4 testimony. Seventeen gives the board authority to require  
5 sampling of domestic wells in and within one-half mile of the  
6 exploration area, and as someone previously mentioned, seven  
7 wells were identified by Powertech and six of them were  
8 sampled.

9           Q.     We will be discussing that in detail later, correct?

10          A.     Yes. The reason for this is to obtain background  
11 water quality data. In the instance, after exploration was  
12 completed, someone with possible contamination concerns, there  
13 would be comparison numbers. Nineteen, inspection of the area  
14 was conducted with members of the department, Game, Fish &  
15 Parks and Powertech staff. This inspection report is included  
16 in the briefing document. The statute was recently amended  
17 under Senate Bill 62 and I will also be speaking on this during  
18 the bond calculation portion of my testimony.

19                 Twenty lists the criteria for determining the bond,  
20 such as potential damages to the environment, topography, soil  
21 and vegetative conditions and surface reclamation and plugging  
22 costs. Twenty-one is similar to language on 45-6B, mine land  
23 reclamation. The operator shall provide evidence of financial  
24 responsibility.

25                 Twenty-two, simply put, the operator may deposit cash

1 or government securities with the board. Twenty-three lists  
2 surety conditions. Our engineering director, project engineer  
3 and program assistant, who all have over 20 years of experience  
4 with the department, reviewed Max Main's draft surety form and  
5 it is in the proper format. Twenty-four, surety liability  
6 continues until the land is reclaimed to its original condition  
7 and is released by the board following an in-depth inspection  
8 by the department. Twenty-five, the surety shall cover the  
9 plugging of all test holes and reclamation. This statute was  
10 recently amended under Senate Bill 62 and I will also be  
11 speaking on this during the bond calculation portion of my  
12 testimony.

13           Twenty-nine states that the board may not deny a  
14 permit except for one of the following reasons, and I will also  
15 be covering these topics later in the testimony. One,  
16 application is incomplete or the surety has not been posted.  
17 Two, applicant has not paid the \$500 fee. Three, the proposed  
18 operation has adverse effects on environment and other aspects.  
19 Five, operation will adversely affect wildlife, and the Game,  
20 Fish & Parks representative is present today if anyone has any  
21 questions later on in this meeting.

22           Thirty-two states the operator needs to follow  
23 particular statutes during the operation. Thirty-three states  
24 that test holes shall be plugged immediately after drilling and  
25 logging of the exploration holes, which Powertech mentioned

1 they would do. If the test holes need to be temporarily left  
2 open, Powertech would need to apply to the board in writing.  
3 Powertech has stated previously that this is not expected.

4 My next slide would be on the plugging of flowing  
5 artesian wells. Flowing artesian holes are expected to be  
6 encountered, but with a small flow of two to 10 gallons per  
7 minute. If the holes are artesian, they will be plugged with  
8 cement. Please note that in the department's bond calculation,  
9 which we will be talking about later, we assume that all holes  
10 will need to be plugged with cement.

11 Q. Mr. Macy, this particular provision that you are  
12 talking about is one of the department's regulations, is it  
13 not?

14 A. Correct.

15 Q. This is not part of 45-6D, but it is referenced in  
16 45-6D.

17 A. Correct. This is just an associated regulation, I  
18 thought I would bring that to the attention. Thirty-four,  
19 simply put, the board may regulate and adopt new plugging  
20 rules. Thirty-five states that the board is given the  
21 authority to regulate and adopt new plugging rules.  
22 Thirty-seven mentions that all roads and trails used in the  
23 project shall be developed to minimize sedimentation and  
24 erosion. Thirty-eight states that the operator shall restore  
25 each drill site and other affected land to its original

1 condition.

2           Thirty-nine is a reporting requirement as listed under  
3 the conditions that the department has generated. It states  
4 the operator shall notify the board of aquifer penetration  
5 within 90 days. Forty, list specifics on the aquifer  
6 penetration report, such as the aquifer that was penetrated,  
7 depth of the aquifer and method to plug each test hole.  
8 Forty-one states the conditions that are required under the  
9 geological report that would need to be submitted, in fact  
10 would include geologic formations, mechanical or geologic logs,  
11 core sections, cuttings and other associated information. The  
12 board may request additional information.

13           Q.    Thank you, Mr. Macy. I'm showing you what's been  
14 marked as Exhibit B. Would you tell me what this is, please?

15           A.    This is a briefing document that the Minerals and  
16 Mining Program put together for this contested case uranium  
17 exploration permit hearing.

18           Q.    Was this document prepared under your direction and  
19 control?

20           A.    Yes, it was.

21           Q.    What are the contents in that document?

22           A.    We have exhibits labeled A through L. There's about  
23 12 of them. Exhibit A is general maps of the exploration area.  
24 B would be the notice of filing the department published. C,  
25 notice of hearing. D, procedural completeness checklist. E,

1 Powertech uranium exploration permit application form and  
2 reclamation plan. F is our permit conditions. G, bond  
3 calculations and assumptions. H, inspection report. I, South  
4 Dakota Game, Fish & Parks recommendations. J is South Dakota  
5 state archaeologist's correspondence. K is the intervention  
6 petitions and comment letters. And L is intervention petitions  
7 and comment letters received after the deadline. And I'll be  
8 referring to this document throughout my testimony.

9 Q. Now, everything you just talked about appear on the  
10 table of contents, which is the second page of Exhibit B,  
11 correct?

12 A. Correct.

13 Q. The first thing, the general maps of the exploration  
14 area, are those documents you prepared?

15 A. Correct, those are our documents that I prepared.

16 Q. And the notice of filing and notice of hearing,  
17 Exhibits B and C, those are documents that were prepared by the  
18 department; is that correct?

19 A. Correct.

20 Q. Exhibit D, procedural completeness checklist, that was  
21 a document prepared by the department?

22 A. Correct.

23 Q. Exhibit E is the application and reclamation plan  
24 submitted by Powertech Uranium Corporation, correct?

25 A. Correct.



1 Q. Exhibit F, permit conditions, is that a document  
2 prepared by the department?

3 A. Yes, it was.

4 Q. Exhibit G, bond calculations and assumptions, was that  
5 prepared by the department?

6 A. Yes, it was.

7 Q. Exhibit H, inspection report, was that prepared by the  
8 department?

9 A. Correct.

10 Q. Exhibit I, which is Game, Fish & Parks  
11 recommendations, is that a document that the department  
12 received during the course of the application?

13 A. Yes, it was.

14 Q. From?

15 A. From the Department of Game, Fish & Parks.

16 Q. What is Exhibit J, state archaeologist's  
17 correspondence, what is that document?

18 A. That's correspondence I had with Mike Fosha, who is  
19 the assistant state archaeologist.

20 Q. That is a document you prepared as a result of a  
21 telephone conversation with Mr. Fosha; is that correct?

22 A. Yes, multiple conversations.

23 Q. Exhibit K, intervention petitions and comment letters,  
24 those are documents received by the department before the  
25 intervention deadline; is that correct?

1 A. Correct.

2 Q. And Exhibit L, intervention petitions and comment  
3 letters, those are the petitions received after the deadline  
4 period; is that correct?

5 A. Correct.

6 Q. All of this is part of the department's file on  
7 Powertech's application for an exploration permit; is that  
8 right?

9 A. Yes, it is.

10 MS. GIEDD: Mr. Chairman, I would move the admission  
11 of Exhibit B.

12 MS. GIEDD: Have you had an opportunity to review it?

13 MR. MAIN: Yes, I have, Mr. Chairman, and the only  
14 comment I have is with regard to Exhibits K and L, since they  
15 are out of court statements, they should not be received for  
16 the truth of the matter asserted therein.

17 MS. GIEDD: The department has no objection to that  
18 condition.

19 CHAIRMAN McCAHREN: I wish I knew what that meant.  
20 They will be received.

21 MR. MAIN: They can't be offered in proof of anything  
22 stated therein.

23 EXHIBITS:

24 (DENR Exhibit B received into evidence.)

25 CHAIRMAN McCAHREN: Do you intend to use this document

1 now, Ms. Giedd?

2 MS. GIEDD: Yes, I will be using this document.

3 CHAIRMAN McCAHREN: Is that going to be projected?

4 MS. GIEDD: Parts of it will be, yes.

5 CHAIRMAN McCAHREN: Do you have extra copies of this  
6 for anybody that might want one?

7 MS. GIEDD: Yes, we have a few up here yet.

8 CHAIRMAN McCAHREN: Who doesn't have one that would  
9 like one? Give one to school and public lands. Thank you. I  
10 was trying to decide if I should have the lights turned on  
11 again. If you are going to use the PowerPoint, I will leave  
12 them off.

13 MS. GIEDD: We won't be --

14 CHAIRMAN McCAHREN: Could you turn these lights on and  
15 leave the ones off over there and maybe we can see the  
16 paperwork if we have to. Is that okay? Thanks.

17 Q. (BY MS. GIEDD) Mr. Macy, Powertech -- did Powertech  
18 file an application for an exploration permit?

19 A. Yes, they did.

20 Q. And where does that appear in your exhibits?

21 A. That appears as Exhibit E.

22 Q. And how many townships were involved in this  
23 application?

24 A. Two contiguous townships.

25 Q. And did Powertech file a plan of reclamation?

1 A. Yes, they did.

2 Q. And does that appear in your exhibits?

3 A. It is also listed under Exhibit E.

4 Q. Before we discuss the application, the reclamation  
5 plan, did Powertech file a map?

6 A. Yes, they did, they filed multiple.

7 Q. I noticed you had some general maps in Exhibit A of  
8 your documents. Are those the same maps that Powertech filed?

9 A. Those are similar maps, but they do not show the  
10 location of their proposed test holes.

11 Q. Why isn't the department submitting the maps that  
12 Powertech submitted to it?

13 A. Actually, I have a slide on this, if you care to look  
14 at the screen. Under 6D-15, it states that confidential  
15 material is protected and is not a matter of public record.

16 Q. So the department prepared different maps in order to  
17 explain the exploration area; is that right?

18 A. Yes, we did.

19 Q. Would you go ahead and, using your maps, acquaint the  
20 board with the location of the proposed operation?

21 A. Yes. On this figure in the southern portion, you may  
22 notice the city of Edgemont and approximately 13 miles to the  
23 northwest is the proposed exploration area.

24 Q. That's the area in orange?

25 A. That is the area in orange.

1 Q. And this map also appears in the briefing document; is  
2 that right?

3 A. Yes. The green area deliniates U.S. Forest Service  
4 land and these yellow areas delineate Bureau of Land Management  
5 lands. The blue line going across is the Custer County and  
6 Fall River County line and this line right here is the South  
7 Dakota/Wyoming state border.

8 Q. And what's the road down there?

9 A. This road down here is U.S. Highway 18. This is a  
10 closer extent and this aerial photo shows several of the  
11 abandoned mines from the 1950s and 1960s in the area.

12 Q. Where are those exactly?

13 A. They are located here, here and here.

14 Q. Kind of those whitish spots?

15 A. Yes, the white areas. The orange line deliniates  
16 Powertech's legal description that they submitted in their  
17 application form.

18 Q. And did Powertech submit their fee with the  
19 application?

20 A. Yes, they did, on July 7th, 2006, in the amount of  
21 \$500.

22 Q. Now, Mr. Macy, you indicated that you were responsible  
23 for reviewing the application, correct?

24 A. Correct.

25 Q. Would you please run the board through what you do in

1 terms of reviewing the completeness of an application?

2 A. Okay. We received the application on July 7th, 2006,  
3 and supplemental information was submitted on August 30th,  
4 September 12th, October 2nd, October 30th, and these procedure  
5 dates are shown under Exhibit D in that briefing document that  
6 was passed out. Now, the permit was first deemed incomplete by  
7 the department and several letters were generated and submitted  
8 to Powertech for additional information, and this information  
9 was on seeding mixtures that are required under the reclamation  
10 plan, surface and mineral lease agreements, proposed  
11 reclamation, exploration hole specifics such as diameter and  
12 depth so that we could determine cement volumes in our bond  
13 calculation, soil permeabilities and other technical questions.  
14 But when we are reviewing this document, we went through South  
15 Dakota Codified Law 45-6D.

16 Q. So there was -- is it fair to say that there was some  
17 time and some give and take involved between Powertech and the  
18 department in terms of looking at this application?

19 A. Yes, there was, and as I mentioned, we sent out many  
20 letters and also had numerous phone conversations with  
21 Powertech personnel.

22 Q. How long did it take you to review the application?

23 A. The application review process was about five months.

24 Q. Did Powertech submit a certification of applicant?

25 A. Yes, they did.

1 Q. And what is that?

2 A. A certification of applicant form just states that the  
3 holders don't have any felonies I should say and this is a  
4 legal document.

5 Q. It's a statutory requirement that that be filed; is  
6 that right?

7 A. Correct.

8 Q. And would you please go through the rest of your  
9 procedural checklist and explain the procedure of reviewing the  
10 permit?

11 A. Okay. Well, after the permit was deemed complete on  
12 October 31, the department generated a notice of filing and  
13 this is shown as Exhibit B in the briefing document. And the  
14 notice of filing is a department announcement to the public  
15 that an application form has been received and it gives general  
16 information on the project and also mentions that written  
17 statements against or for the application may be filed with the  
18 department. This notice of filing was published once a week  
19 for two consecutive weeks in multiple newspapers on the 15th  
20 and 22nd of November. Powertech published this notice of  
21 filing in the Edgemont Herald Tribune and the department  
22 published in the rest of the newspapers in that list. The  
23 notice of filing was also mailed to surface owners and leasees  
24 on November 21st, 2006.

25 The deadline for comments was December 12th, which was

1 20 days after the last publication of the notice of filing. We  
2 received comments from two supporters and 10 intervenors and  
3 these are also shown under Exhibit K of the briefing document.  
4 I will briefly go over these. On December 4th, we received an  
5 e-mail from Mr. Harold One Feather, who is present today with  
6 us. That is shown on page K-1. K-2 is an e-mail from Mr. John  
7 Lekay, he is not present. K-3 is the intervention petition  
8 from Mr. Richard Fort. K-4 is an e-mail from Mr. Alex  
9 Plechash. He is not present and when we attempted to contact  
10 him, we were notified that this e-mail was forwarded on and he  
11 didn't want to be part of the intervention process, but we  
12 included it in the briefing document.

13 K-6 is the letter that was submitted by Charmaine  
14 White Face and also on the back of this document you will see  
15 Clifford White Eyes, Bill Center, Alice Four Horns, Janice Bad  
16 Horse Larson and Sylvia Lambert submitted similar letters and  
17 signed their names to them. K-8 is an e-mail that was received  
18 from Mr. John Putnam, who is also present today. And K-9 is an  
19 e-mail from Mr. Keith Andersen. Exhibit L contains the  
20 comments that were received after the December 12th deadline.

21 The notice of hearing was published on January 3rd and  
22 10th and was mailed to the county commissioners, Game, Fish &  
23 Parks, U.S. Fish and Wildlife Service, Powertech, interested  
24 persons mailing list and the intervenors. It was also  
25 published in seven newspapers by the department. And this is



1 shown as Exhibit C in the briefing documents.

2 Q. Thank you, Mr. Macy. Would you please describe for  
3 the board the proposed activities that Powertech is proposing  
4 under this application?

5 A. The proposed activities include the drilling of 155  
6 exploration holes in the Fall River and Lakota formations.  
7 Each of these holes will be approximately 500 to 600 feet in  
8 depth and will be logged radiometrically for uranium and  
9 vanadium.

10 Q. And tell me, what's an exploration hole?

11 A. An exploration hole is similar to a water well.  
12 Powertech will go in there, drill the hole and after they log  
13 it with tools, they plan on sealing the hole.

14 Q. Okay, and what do you mean by logging?

15 A. Logging is a process where they use probably some type  
16 of neutron probe. They will insert this tool down the hole and  
17 record I guess geologic formations, porosity properties,  
18 depending on how the neutrons are absorbed or deflected from  
19 the different settings in the hole.

20 Q. And you assume that Powertech will actually present  
21 more detailed evidence on this, do you not?

22 A. Correct.

23 Q. You indicated that the application includes two pump  
24 tests; is that right?

25 A. Yes.

1 Q. What's a pump test?

2 A. A pump test is to determine hydraulic parameters of an  
3 aquifer. Powertech plans to I believe case several of their  
4 exploration holes, install a pump and to determine draw down  
5 and different aquifer parameters.

6 Q. So when they pump, what are they pumping out?

7 A. They plan on pumping around 20 gallons per minute.

8 Q. Of water?

9 A. Of water.

10 Q. And what happens to the water after it's pumped out?

11 A. This hasn't been determined by Powertech, but they  
12 either plan to put this water into a lined storage pond or  
13 possibly reinject the water into the formation, and to reinject  
14 the water into the formation, they would need an EPA injection  
15 permit.

16 Q. Why are they actually doing a pump test?

17 A. Well, this pumping test will help them predict  
18 long-term yield, aquifer potential, I guess evaluate hydrologic  
19 characteristics of geologic formations, to see if possibly  
20 in-situ mining will be possibly successful in this area.

21 Q. It gives them geologic and hydrologic information that  
22 they need to evaluate whether or not further activities are  
23 warranted on the site; is that right?

24 A. Yes.

25 Q. What happens when they are done with their pump test?

1 A. They plan to plug and seal these wells.

2 Q. And you said -- so they are not doing pump tests on  
3 all the wells; is that right?

4 A. Just two.

5 Q. So on all the wells, though, do they have to seal all  
6 the exploration holes that they drill, whether they do a pump  
7 test or not?

8 A. Yes, they do.

9 Q. And how do you know what requirements are applicable  
10 for plugging the wells?

11 A. Those would be in the South Dakota well construction  
12 standards.

13 Q. Which are what?

14 A. I believe 74:11:04:08.

15 Q. These are regulations of the Department of  
16 Environment --

17 A. Regulations of the department.

18 Q. Was a reclamation plan submitted?

19 A. Yes, it was.

20 Q. And what does the reclamation plan propose doing?

21 A. The reclamation plan proposes plugging all the  
22 exploration holes and reclaiming the land surfaces to the  
23 original condition.

24 Q. Tell me what that means.

25 A. Well, after they get done plugging the holes most

1 likely with cement, they will take in dozers, fill in the mud  
2 pits that were constructed for the drilling process, regrade  
3 these, distribute topsoil, seed, mulch, and fertilize the area.

4 Q. Will they be building any roads?

5 A. No, they will not, but if they do, they need to  
6 construct proper sedimentation controls and we have this  
7 conditioned in their possible permit conditions.

8 Q. So how will the drill rigs get there?

9 A. Possibly just go across the land surface.

10 Q. You mentioned that the state has drill hole plugging  
11 regulations, correct?

12 A. Correct.

13 Q. And what are those regulations? Do you have them?

14 A. Yes, I actually have them in a slide. Those are  
15 74:11:08:07.

16 Q. And explain to me -- this one says plugging flowing  
17 artesian wells.

18 A. Correct.

19 Q. What does that mean?

20 A. A flowing artesian well would be if it was just an  
21 open hole, water would come to the surface and possibly  
22 discharge out onto the ground.

23 Q. And does the department anticipate that you will have  
24 flowing artesian conditions with some of these exploration  
25 holes they drill?

1           A.    Yes, we do, at flows of approximately two to 10  
2 gallons per minute.

3           Q.    And what happens in terms of how you have to plug a  
4 flowing artesian well?  What are the requirements by the  
5 regulations to plug those kind of wells?

6           A.    Cement will need to be inserted into the hole up to  
7 approximately three feet below the ground surface and at that  
8 point native soil material and topsoil will be put in for the  
9 remaining three feet and it will be seeded and reclaimed.

10          Q.    If the well hole is not a flowing artesian well, is  
11 there a different plugging requirement?

12          A.    There is a different plugging requirement and I  
13 believe that's in 08:06 and 08:05.

14          Q.    74:11:08:06 or 05?

15          A.    Correct.

16          Q.    What are the requirements for plugging a well without  
17 artesian conditions?

18          A.    It's actually less stringent than what the department  
19 bonded for.  We assumed that all holes in this exploration  
20 project will need to be plugged with cement.

21          Q.    Yeah, but I didn't ask you that.  I said tell me  
22 how --

23          A.    Be filled with I guess drill cuttings that would keep  
24 the water level down, not going to the surface, possibly like a  
25 SureGel or some type of other cementing fluid.

1 Q. That's what the regulation requires for nonartesian  
2 conditions?

3 A. Correct.

4 Q. Did the application propose a cost estimate for  
5 plugging and reclamation of their drill holes?

6 A. Yes, they did.

7 Q. And how much did the application propose it would  
8 cost?

9 A. Approximately \$152,000.

10 Q. Now, we will be talking about our surety calculations,  
11 but is it fair to say that our bond is for more than that?

12 A. Yes, \$58,000 more than what they proposed.

13 Q. Was notice of the application filed with the register  
14 of deeds?

15 A. Yes, it was, on three separate occasions and we  
16 received documentation from the Fall River and Custer County  
17 Register of Deeds offices as proof of this filing.

18 Q. Was notice of the application published?

19 A. Yes, it was.

20 Q. Was notice of the application provided to Game, Fish &  
21 Parks?

22 A. Yes, it was.

23 Q. And did Game, Fish & Parks respond to that notice?

24 A. Yes, they did. Their response and recommendations are  
25 listed in Exhibit I of the briefing document.

1 Q. And Mr. Macy, it's a fairly short letter, but would  
2 you please read into the record the comments that Game, Fish &  
3 Parks submitted on the application?

4 A. Yes, I will. South Dakota Game, Fish & Parks submits  
5 the following comments to the South Dakota Department of  
6 Environment and Natural Resources in support of the above-  
7 referenced project. All raptor nests on the project area shall  
8 be reported to the Game, Fish & Parks energy and mineral  
9 coordinator at any of the numbers listed below. It should be  
10 noted that exploration activity near active nests will likely  
11 result in distance or timing restrictions. Drill holes shall  
12 not be placed in areas prone to standing water or 100 feet from  
13 either side of Beaver Creek. Please consult with Game, Fish &  
14 Parks if ponds are constructed to contain produced water during  
15 exploration drilling or pump tests. If you have any questions  
16 regarding this information, please contact me at the numbers  
17 listed below.

18 Q. And were these restrictions made part of the  
19 department's conditions?

20 A. Yes, they were.

21 Q. Did the department provide notice of the application  
22 to the state archaeologist?

23 A. Yes, they did.

24 Q. And you had a conversation with the state  
25 archaeologist with regard to his activities with regard to the

1 application?

2 A. Yes, on several occasions.

3 Q. And I would refer you to Exhibit J. Would you tell  
4 me, is that -- what is that?

5 A. This is a phone memo that I prepared in regards to the  
6 conversations that I had with Mr. Mike Fosha.

7 Q. And would you read the second paragraph of that into  
8 the record, please?

9 A. That I will. On Wednesday, October 4th, 2006, Mr.  
10 Fosha called our program and said he had traveled to the  
11 Dewey-Burdock area in southwestern South Dakota and surveyed  
12 for cultural resources. Mr. Fosha stated no significant  
13 cultural resources were identified or recorded in the immediate  
14 vicinity of the project area and that exploration and  
15 reclamation can proceed as conditioned by our department.

16 Q. So the state archaeologist had no additional  
17 conditions to place on the permit; is that correct?

18 A. No, he did not.

19 Q. Mr. Macy, you indicated that SDCL 45-6D-17 allows the  
20 board to require the applicant to provide water quality  
21 information concerning designated domestic water wells within  
22 the proposed permit area. Did the department require that  
23 information be gathered?

24 A. Yes, we did.

25 Q. And would you explain what you required and what you



1 received?

2 A. That I will. Well, 17, as Roxanne stated, gives the  
3 board the authority to require sampling of domestic wells in  
4 and within one-half mile of the proposed area. Seven wells  
5 were identified by Powertech and these wells corresponded to  
6 what the DENR had in our well database system.

7 Q. You went and checked?

8 A. I went and checked.

9 Q. Okay.

10 A. Due to integrity problems at one of these wells, it  
11 was at an abandoned ranch, six wells were sampled and DENR  
12 wanted background water quality data, just in case after  
13 exploration operations were completed, if someone came forward  
14 with possible contamination concerns, we would have comparison  
15 numbers to look back on.

16 Q. And you prepared a slide for us, a map that shows us  
17 where the wells are; is that correct?

18 A. That is correct. If you look up on the screen here,  
19 this shows the proposed exploration project and the blue dots  
20 delineate the wells that were sampled.

21 Q. Now, what is the domestic well? What are we talking  
22 about here?

23 A. A domestic well is a well that can be used by I guess  
24 citizens for their private use. No public water wells were  
25 located in the proposed exploration area.

1 Q. Okay, so this is private wells?

2 A. These are private wells.

3 Q. I assume that they are mostly livestock wells or is  
4 that inaccurate?

5 A. There are several stock wells also in this area, but  
6 those aren't delineated on the map. I am not sure of the  
7 particular use of each one of these wells.

8 Q. Do you know the source of the water for these wells?

9 A. Yes, it is the Lakota and Fall River formations.

10 Q. And is that important?

11 A. Yes, it is. It is the same formations that Powertech  
12 plans to explore.

13 Q. And so did the department require samples be taken; is  
14 that right?

15 A. Yes, we did.

16 Q. Were samples taken?

17 A. Samples were taken and Powertech actually sampled more  
18 parameters than what the department required.

19 Q. So the department told them to analyze the samples for  
20 certain parameters; is that right?

21 A. That is correct.

22 Q. And Powertech did more than that?

23 A. Yes.

24 Q. What were the parameters that the department was  
25 interested in?

1       A.    Well, the standard physical parameters along with  
2 inorganics, organics, heavy metals and radio nuclides.

3       Q.    Did you receive a copy of the laboratory results?

4       A.    Yes, we did.

5       Q.    And what did they show generally?

6       A.    I prepared a slide here with several parameters of  
7 interest.  The first is gross alpha, and most naturally  
8 occurring radioactive elements emit alpha particles as they  
9 decay and detection of alpha particles in water signals the  
10 presence of possible radioactive sources.  Radium 226 and 228,  
11 that's a radioactive metal that occurs naturally in trace  
12 amounts in all rocks, soils and ground water.  And as radium  
13 decays, it continually releases energy into the environment  
14 till a stable, nonradioactive substance is formed.  Radon is a  
15 gas that is formed by the natural radioactive decay of radium,  
16 and uranium is an extremely heavy metal.

17       Q.    Those are the parameters you are going to discuss?

18       A.    Yes.

19       Q.    As well as TDS and sulfates?

20       A.    Correct.

21       Q.    What's TDS?

22       A.    TDS refers to any minerals, salts, metals, cations or  
23 anions dissolved in water.

24       Q.    And is TDS associated with uranium or is that more  
25 general parameters?

1 A. It's more of a general physical parameter.

2 Q. What about sulfates?

3 A. Sulfates are a combination of sulfur and oxygen and  
4 are part of just naturally occurring minerals.

5 Q. And again are sulfates just associated with uranium or  
6 is that more of a parameter that's tested with regard to water  
7 routinely?

8 A. It's more of just a parameter tested with water.

9 Q. What is the GW standard?

10 A. GW standard is the South Dakota ground water standard  
11 for the parameters I have listed.

12 Q. And would you -- sample range, what's that mean?

13 A. That's just the range. Powertech sampled six wells  
14 and as you may notice from this slide, radio nuclide levels did  
15 vary from below ground water standards to extremely exceeding  
16 ground water standards and Powertech did notify all well owners  
17 of the data they collected and shared these results.

18 Q. So the sample range are the result, the laboratory  
19 results you got on the samples you requested Powertech to take?

20 A. Correct.

21 Q. This is the range that existed with all five samples?

22 A. All six samples, yes.

23 Q. So what does this mean to you?

24 A. Well, the higher values show us that there is an ore  
25 body located in these formations. The gross alpha, the ground

1 water standard is 15 picocuries per liter and Powertech got  
2 ranges from 12 to 560, and if you go down to radon, the ground  
3 water standard is 300 picocuries per liter, and that ranged  
4 from just slightly over the ground water standard to heavily  
5 exceeding the ground water standard at 197,000.

6 Q. You said that these indicate to you that an ore body  
7 is present. What ore are we talking about?

8 A. Uranium.

9 Q. What about TDS and sulfates, what did that look like?

10 A. TDS and sulfates were near the ground water standards.  
11 I believe for TDS values ranged from 880 to 1,000 milligrams  
12 per liter and the standard is 1,000. And sulfates, these  
13 values ranged from 500, or no, excuse me, 473 to 522 milligrams  
14 per liter and the ground water standard is 3500 milligrams per  
15 liter.

16 Q. Now, is this considered background water quality data  
17 that may be submitted for an actual mining permit application?

18 A. It could be submitted as background data, but for a  
19 mine permit application, we would require much more sampling.

20 Q. So this may be a piece of the information, but it's  
21 not the extent of background, is it?

22 A. Correct, not by far.

23 Q. Is it even close to what we would require for  
24 background water quality?

25 A. No.

1 Q. Why did the department require this information?

2 A. As I previously mentioned, just in case after  
3 exploration operations were completed, if someone came with  
4 some concerns of contamination, we would have some numbers to  
5 look back on. And the previous data we had was from  
6 exploration late seventies and early eighties, so it was a  
7 little outdated.

8 Q. Did the department conduct an inspection of the permit  
9 area?

10 A. Yes, we did.

11 Q. And your inspection report appears in your exhibits,  
12 does it not?

13 A. It does, it appears in Exhibit H.

14 Q. Who attended this inspection?

15 A. As you will notice from this slide, many of the  
16 reviewers attended the inspection that was conducted on  
17 September 13th, with Powertech, and the Department of Game,  
18 Fish & Parks.

19 Q. This includes a hydrologist from the ground water  
20 quality program.

21 A. Yes, it does.

22 Q. And what other programs were involved?

23 A. The engineering director from the surface water  
24 quality program, the engineering specialist from the water  
25 rights program, there was four project engineers from the

1 mining program, along with the engineering director.

2 Q. Would you describe for the board the area of the  
3 proposed operations?

4 A. Yes, I will. Well, the department conducted  
5 inspection of the proposed area on September 13th, 2006. The  
6 U.S. Forest Service and state archaeologist were invited but  
7 were not able to attend and the state archaeologist traveled to  
8 the site at a later date and conducted an inspection. The  
9 first site we traveled to was located in the southeast portion  
10 of the exploration area. The area can be characterized as  
11 pretty much rolling pasture lands. You may notice cattle  
12 grazing in the left side of that picture up on the screen,  
13 small little brown dots there, they are kind of far away. But  
14 vegetation noted included buffalo grass, sage brush, prickly  
15 pear cacti and several other types of grasses. Vegetation  
16 ranged from 50 to 80 percent in this particular area.

17 The second site we visited was located in the  
18 northwest portion of the proposed exploration area and it was  
19 located before a series of small bluffs. Sage brush was the  
20 predominant species in this area, along with some grasses, pine  
21 trees and cottonwood trees. Vegetative cover ranged from 40 to  
22 80 percent. We also inspected the Beaver Creek area, which is  
23 the closest body of water to the exploration site. There are  
24 numerous cottonwood trees along the creek. The creek had  
25 minimal flow. It was only around four to five inches deep and

1 about 10 feet wide. A school of minnows was observed in the  
2 creek along with a small turtle.

3 Q. How close is Beaver Creek to the proposed area?

4 A. Approximately one mile.

5 Q. One mile away from it?

6 A. From where they will be drilling, but it's closer to  
7 their land holdings.

8 Q. Say that again.

9 A. It's probably about a mile from where Powertech plans  
10 to conduct some of their exploration drilling, but it is near  
11 and adjacent to their land holdings.

12 Q. If the board decides to issue this application, is the  
13 department recommending conditions be placed on the permit?

14 A. Yes, we are.

15 Q. And do those appear in your briefing book?

16 A. Yes, they do. They appear under Exhibit F.

17 Q. And will you generally go through those conditions,  
18 please?

19 A. Yes, I will. The first conditions are what we  
20 consider standard conditions. 1.1.1 and 1.1.2 are standard  
21 language that we insert into most exploration and mining  
22 permits, that all representations contained in the permit  
23 application are true and that if they are found to be false,  
24 permit may be terminated. 1.1.3 --

25 Q. Before you go on to that, 1.2 deals with other permits



1 that may be required; is that right?

2 A. Yes, section 1.2.

3 Q. What are those other permits that might be required?

4 A. Oh, I haven't quite got to that section yet.

5 Q. Oh, okay, sorry.

6 A. 1.1.3, permit is conditioned on compliance with all  
7 laws and regulations. 1.1.4, Powertech shall follow the  
8 recommendations of the Game, Fish & Parks and Fall River and  
9 Custer County Natural Resource Conservation Services.

10 1.2 is other permits. 1.2.1, general permit for storm  
11 water. This would deal mostly with erosion control. 1.2.1,  
12 Powertech is required to maintain coverage under the South  
13 Dakota general -- 1.2.2, a temporary water rights permit is  
14 required if Powertech plans to pump water during pumping test,  
15 and Powertech has been in contact with the water rights program  
16 on this permit. 1.2.3, these conditions do not change the  
17 requirements of other existing and future permits for the  
18 project.

19 1.3 deals with exploration holes and wells. 1.3.1,  
20 Powertech shall plug the holes in accordance with state  
21 statutes and regulations. This next slide, I previously  
22 mentioned these before, but here they are again, just on the  
23 capping, sealing and plugging of the test holes and plugging of  
24 the flowing artesian wells. 1.3.2, topsoil shall be stockpiled  
25 and the pits need to be reclaimed. 1.3.3, a hole abandonment

1 report shall be made available to the department upon request.  
2 Condition 1.3.4, Powertech shall notify the department by  
3 telephone before plugging the holes so we can have a  
4 representative out at the site observing the reclamation.

5 1.4 deals with water management. 1.4.1, prevent  
6 violations in Beaver Creek. 1.4.2, need a South Dakota surface  
7 water discharge permit if they plan on discharging water during  
8 their pumping test.

9 1.5 is erosion and sediment control. 1.5.1, contact  
10 DENR and Game, Fish & Parks if sediment is found entering the  
11 creek due to exploration activities. 1.5.2 deals with the  
12 installation of erosion and sediment control structures.

13 1.6, duty to mitigate. This deals primarily with the  
14 prevention and reporting of spills. 1.7 is reclamation.

15 1.7.1, Powertech shall reclaim all affected land in accordance  
16 with the statutes. 1.7.2, all topsoil shall be salvaged and  
17 stockpiled, and 1.7.3 is the recommended seed mix from the  
18 Custer and Fall River County NRCS, which includes western  
19 wheatgrass, green needlegrass, blue grama and sideoats grama.

20 1.8 is property rights. 1.8.1, the issuance of this  
21 permit does not convey any property right of any sort, and  
22 during our review process, we meticulously went over all  
23 surface and land agreements. 1.8.2, before entering the lands  
24 owned by GCC Dacotah, Powertech shall serve notice on GCC  
25 Dacotah pursuant to state statute.

1           1.9 is a Game, Fish & Parks condition. All raptor  
2 nests identified within the project area shall be reported to  
3 the Department of Game, Fish & Parks. 2.0 is our reclamation  
4 surety and I'll be going into these figures a little later in  
5 my testimony. 2.1.1, Powertech shall submit a \$213,500  
6 reclamation surety to the department prior to the issuance of  
7 the permit by the board. We reserve the right to adjust the  
8 reclamation surety amount for inflation or unanticipated  
9 conditions.

10           3.0 is permit renewal requirements. 3.1.1, permit  
11 effective, this permit shall expire three years from the date  
12 of issuance unless reopened or terminated for cause. 3.2 is  
13 permit renewal. 3.2.1, Powertech shall submit an application  
14 for permit renewal at least 30 days before the date of permit  
15 expiration, and 3.2.2, Powertech shall submit the aquifer  
16 penetration report prior to renewal, which I mentioned earlier  
17 in my testimony. 3.3 is permit expiration. 3.3.1, the permit  
18 expiration terminates Powertech's right to continue uranium  
19 exploration activities by this permit.

20           4.0 is record keeping and reporting requirements.  
21 4.1, penetration of aquifer. 4.1.1, mentioned before in my  
22 testimony. 4.2, geologic conditions. 4.2.1, Powertech shall  
23 submit a report concerning the geological conditions in this  
24 permit area. 4.3, permit violations, and this just lists  
25 specifics on permit violations and what Powertech will need to

1 follow.

2 Q. Now, with regard to the surety, the department has  
3 recommended what surety amount?

4 A. \$213,500.

5 Q. And I noticed when you were reading condition 2.1.1,  
6 which is the surety condition, my copy says the department  
7 reserving the right to adjust the reclamation surety amount for  
8 inflation, unanticipated conditions encountered during the  
9 exploration operation or changes in the proposed method of pump  
10 test water disposal.

11 A. Correct.

12 Q. You just skipped over that last part.

13 A. Sorry.

14 Q. Would you explain how the department determined your  
15 surety number of \$213,500?

16 A. That I will. As I mentioned earlier in my testimony,  
17 several changes to the statutes were made last year and both  
18 were more stringent on possible operations. The first was to  
19 19, which eliminated the \$20,000 statewide surety for  
20 exploration operations, and it was replaced with a bond to  
21 cover entire reclamation. In this case it's \$213,500, much  
22 more of an increase. The second change was to 25, which  
23 increased surety from covering just 10 percent of reclamation  
24 of the holes to 100 percent of the holes.

25 These bond calculations are shown under Exhibit G in

1 the briefing document, if you would like to follow along. The  
2 first calculation was for plugging of the holes. This included  
3 drill rig time, labor and cost of cement. The total was  
4 \$132,798. The second calculation was for surface reclamation,  
5 moving material with a dozer, topsoil grading, seeding, mulch,  
6 fertilizer and erosion control. This total was \$18,761 for a  
7 total of \$151,469.

8 Q. What do you mean by water treatment there?

9 A. Water treatment, this calculation was if Powertech did  
10 not plan to reinject the water but possibly treat it and this  
11 was for the maximum amount they would possibly take out of the  
12 aquifer, 20 gallons per minute at 72 hours. We also had  
13 indirect costs associated with the project. These would  
14 include mobilization, performance bond, contractor overhead,  
15 state excise tax, contractor profit, contingency, then  
16 inspection, administration and maintenance and that brings the  
17 final total to \$213,500.

18 Q. Did you consider, in making these calculations,  
19 potential damages to historic sites, springs, water storage and  
20 transport facilities, domestic and public water wells and water  
21 supply, waste water facilities or crops?

22 A. Yes, we did.

23 Q. Did you consider topography?

24 A. Yes, we did.

25 Q. And how did you consider it? How did you work that

1 into these calculations?

2 A. We considered topography, topsoil conditions, you  
3 know, fertilizer would need to be put down because of the arid  
4 climate, along with mulch so that the seed mix would not be  
5 blown away. Mostly it's just rolling pasture land so there's  
6 no slope stability concerns. We also have in the bond erosion  
7 and sedimentation control.

8 Q. Did you consider climatic soil and vegetative  
9 conditions?

10 A. Yes, we did, and we required soil permeability numbers  
11 from Powertech and they provided those.

12 Q. Is your surety amount equal to 100 percent of the cost  
13 of plugging and reclamation of the drill holes to the  
14 department?

15 A. Yes.

16 Q. If the department had to plug them.

17 A. Yes. Our calculation was \$58,000 more than what  
18 Powertech proposed.

19 Q. Mr. Macy, SDCL 45-6D-29 lists the reasons that the  
20 board can deny a uranium exploration permit application,  
21 correct?

22 A. Correct.

23 Q. Is this application incomplete?

24 A. The application is complete.

25 Q. Has the surety been posted as of this date?

1           A.     The surety has not been posted because the surety bond  
2 number needs to be approved by the board, but Max Main provided  
3 a draft surety and this has been reviewed by Mr. Mike Cepak,  
4 Mr. Eric Holm, and Ms. Patty Bruckner with the mining program  
5 and they each have over 20 years experience with the  
6 department.

7           Q.     So the form of the surety has been approved by the  
8 department?

9           A.     The form has been approved by the department.

10          Q.     But it has not yet been filed?

11          A.     Because the exact number needs to be approved, yes.

12          Q.     Has the applicant paid the fee?

13          A.     Yes, they have paid the \$500 application fee.

14          Q.     During your inspection, did you observe any  
15 petroglyphs or pictographs in the affected lands?

16          A.     No, we did not.

17          Q.     Did you observe any historic or archaeological aspects  
18 of land that may be injured by activity on the affected lands?

19          A.     No, we did not.

20          Q.     Are there any known historic sites in the area?

21          A.     Besides a few abandoned mines from the 1950s and  
22 1960s, we did not notice any, and either did the state  
23 archaeologist.

24          Q.     Do you consider abandoned mines historic sites?

25          A.     They are older than me.

1 Q. Did you, during your inspection, observe any unusual  
2 geologic or scientific areas on the affected land?

3 A. No, we did not.

4 Q. What recreation occurs on the affected land?

5 A. You know, hypothesizing, possibly horse riding, four  
6 wheeling, hunting.

7 Q. Are there any walk-in hunting areas?

8 A. There is one walk-in hunting area located near the  
9 exploration area, but not in the exploration area.

10 Q. What adverse effects will the proposed operation have  
11 on the recreational aspects of the affected or surrounding  
12 land?

13 A. We believe it will have none.

14 Q. What watershed does the affected land lie in?

15 A. The Beaver Creek watershed, which is a tributary to  
16 the Cheyenne River.

17 Q. And how did you determine that?

18 A. From past USGS maps, topographic maps, studies  
19 conducted by the department.

20 Q. Will the exploration operation affect the watershed?

21 A. No, it will not.

22 Q. Why not?

23 A. The exploration -- the proposed exploration is of  
24 significant distance from the Beaver Creek area and Powertech  
25 proposes not to discharge any water.



1 Q. What's an aquifer recharge area?

2 A. An aquifer recharge area is when an aquifer section  
3 outcrops and possible precipitation, surface water flow can hit  
4 the aquifer and recharge back into the system.

5 Q. It's porous rock on the surface?

6 A. Correct.

7 Q. So that rainfall hits the porous rock and goes down  
8 into the aquifer and recharges it?

9 A. Yeah, that's one example.

10 Q. Are there any aquifer recharge areas on the affected  
11 land?

12 A. No.

13 Q. Are there some near it?

14 A. There are some to the west -- no, excuse me, to the  
15 east and to the north, but this is actually upgradient from the  
16 exploration area, upgradient meaning --

17 Q. Uphill?

18 A. Yes, and flowing down.

19 Q. These aquifer recharge areas that you are talking  
20 about are uphill from where the wells will be drilled; is that  
21 what you are saying?

22 A. Yes.

23 Q. And how did you determine that?

24 A. From topographic maps.

25 Q. Do you expect the proposed exploration operation to

1 affect those aquifer recharge areas?

2 A. No, we do not.

3 Q. Why not?

4 A. Because like you said, they are uphill.

5 Q. Water doesn't go uphill.

6 A. Water does not go uphill.

7 Q. Naturally. During your inspection, did you observe  
8 any significant agricultural areas on the affected land?

9 A. No, we did not.

10 Q. I think you said that it was range land.

11 A. Yeah, it was predominantly range land. We did not  
12 notice any crops in the area. Mostly sage brush, prickly pear  
13 cacti, buffalo grass, some warm season grasses.

14 Q. Do you expect the proposed exploration operation to  
15 affect the grazing uses of this land?

16 A. No, we do not.

17 Q. Is there any threatened or endangered wildlife  
18 indigenous to the area within the affected land?

19 A. We did not observe any during our inspection, but a  
20 member of the Game, Fish & Parks is present if anyone has any  
21 questions on that issue.

22 Q. Did the Department of Game, Fish & Parks indicate in  
23 their letter to you that there was any threatened or endangered  
24 species that would be involved or associated with the area?

25 A. No, they did not.

1 Q. And so the department, if the board grants the  
2 application, the department is recommending that the conditions  
3 that appear in your briefing book be conditions of the permit;  
4 is that right?

5 A. Correct.

6 Q. And that is the conditions appearing where, Exhibit F?

7 A. Yes, Exhibit F.

8 MS. GIEDD: I have no further questions of Mr. Macy.

9 CHAIRMAN McCAHREN: Thank you. Mr. Main, cross.

10 MR. MAIN: Thank you, Mr. Chairman.

11 CROSS-EXAMINATION

12 BY MR. MAIN:

13 Q. Mr. Macy, I believe you testified that Powertech  
14 submitted evidence of consultations with the surface owners in  
15 the affected areas.

16 A. Correct, they did.

17 Q. Did any surface owners make written preferences for  
18 reclamation that were contrary to the reclamation plan proposed  
19 by Powertech that were filed with the department?

20 A. No surface owner submitted written comments to  
21 Powertech. But I believe Richard Blubaugh did receive two  
22 phone calls and those considerations were put into the  
23 reclamation plan.

24 Q. Thank you. Did you receive, the department receive  
25 any written travel restrictions from any of the surface owners?

1 A. No, they did not.

2 Q. Did Powertech submit satisfactory evidence to the  
3 department of its authority to conduct this mineral exploration  
4 of these mineral interests?

5 A. Yes, we received over 200 pages of surface and lease  
6 agreements from Powertech.

7 Q. The \$213,500 reclamation calculation, that would be to  
8 reclaim 100 percent of all of the drill holes, correct?

9 A. Correct.

10 Q. Or to plug 100 percent of the drill holes.

11 A. Yes, with cement.

12 Q. And to reclaim all of the affected surface.

13 A. Correct.

14 Q. Does that include reclaiming any pump test water pits  
15 that may be dug to hold pump test water?

16 A. Yes, it does. In that reclamation calculation, we  
17 bonded for possible liner removal reclamation, water treatment.

18 Q. And if Powertech changes and decides to -- and gets  
19 authority to reinject that water, you have reserved the right  
20 to recalculate that surety, correct?

21 A. Yes, we have.

22 Q. The domestic water well parameters that you did have  
23 up there that showed the ranges from the six domestic water  
24 wells that were tested -- yes, thank you -- does that show the  
25 baseline water quality now prior to Powertech doing any

1 drilling?

2 A. It shows it at several locations and the highest  
3 values that are shown are actually from Mr. Putnam's well and  
4 he is present today.

5 Q. But these values have been sampled and determined  
6 prior to Powertech doing any exploration drilling.

7 A. Correct, and they do compare with past data that we  
8 have, we have viewed.

9 Q. They are not unusual.

10 A. No.

11 Q. I mean, they are unusual with regard to ground water  
12 standards but not for water in the area.

13 A. Correct.

14 MR. MAIN: Thank you, Mr. Macy. That's all the  
15 questions I have, Mr. Chairman.

16 CHAIRMAN McCAHREN: Thank you. You are first, Mr.  
17 Fort.

18 MR. FORT: Thank you.

19 CROSS-EXAMINATION

20 BY MR. FORT:

21 Q. Mr. Macy, you mentioned this, but I didn't get it  
22 down. What is the aquifer underlying?

23 A. The Fall River and Lakota formations and those are  
24 part of the Inyan Kara group.

25 Q. Fall River, Lakota.

1 A. Yes.

2 Q. And you mentioned that a couple of those holes will  
3 be -- am I right a couple of them will be artesian wells?

4 A. We are expecting assumed artesian conditions, around  
5 two to 10 gallons per minute.

6 Q. Why do you assume they will be artesian?

7 A. From past well completion reports in the area and what  
8 the department has on record in their well database file.

9 Q. Does that imply that there's quite a bit of water down  
10 there and that it's under pressure?

11 A. Well, it's under artesian pressure anyway. They  
12 aren't going to be gushing exploration holes, but I believe  
13 Powertech will probably address this during their testimony,  
14 that they are going to be keeping drilling fluids in the  
15 exploration holes so water does not come to the surface.

16 Q. I see. Is this -- is the Fall River Lakota a  
17 sandstone?

18 A. Yes.

19 Q. Is the ore body within that?

20 A. Yes, it is.

21 Q. I have another question having to do with your  
22 45-6D-29, in estimating there is no reasons for denial in  
23 regard to historic or archaeological, geologic and so forth, if  
24 you recall. In your Exhibit J, you do have this reference from  
25 Mr. Fosha in regard to the archaeological, that there's no

1 archaeological significance to the area; is that right?

2 A. In the exploration area, correct.

3 Q. Is he the only one you consulted?

4 A. With state statutes, we needed to talk to the state  
5 archaeologist and he is the state archaeologist.

6 Q. There was nobody else that you consulted?

7 A. Not that I'm aware.

8 Q. What about the Native American community?

9 A. No, we did not.

10 Q. They were not asked?

11 A. No.

12 Q. Who did you consult in regard to the historic  
13 significance of the area?

14 A. That would be the state archaeologist.

15 Q. His field is archaeology.

16 A. Correct.

17 Q. So basically you didn't really consult with a  
18 historian about that?

19 A. It's pretty much predominantly range land, pasture  
20 land in the area. We didn't note any historic dwellings,  
21 structures, during our inspection.

22 MR. FORT: That's all I have.

23 CHAIRMAN McCAHREN: Mr. One Feather, do you have any  
24 questions of the witness?

25 CROSS-EXAMINATION

1 BY MR. ONE FEATHER:

2 Q. On H-7 there's a photo four in this book. Where did  
3 that water come from? Is that where you were talking about the  
4 holes, the unplugged well holes from long ago? Everybody knows  
5 it's a drought and there's water in there. It couldn't have  
6 been rain and it looks like the water has been standing for  
7 quite a few years because there's reeds and willows and stuff  
8 laying around there. Is this indicative of the hole, this old  
9 abandoned mine, kind of scraping whatever you can call it that  
10 would cause it to fill with water?

11 A. Precipitation, you know, is a possible source of that  
12 water. It could be the similar source of what's in Beaver  
13 Creek.

14 Q. That's further upstream from this.

15 A. We did not notice any flowing artesian holes from  
16 previous exploration in the late seventies or early eighties.

17 Q. Like when you guys -- you got the money from them, the  
18 surety bond, did you guys really like -- my comments were more  
19 or less on Powertech itself, not so much the permitting process  
20 and all this other stuff, because like I have been saying over  
21 and over, it seems like outsiders can come and buy out this  
22 place, cause tragedies like this to the environment, photo  
23 four, they dug a big hole, the water is probably radioactive  
24 and probably poisonous, and I don't know, I wouldn't go fish  
25 out there and drink the water or let my horse drink it if I



1 took it out there. It's these outsiders that come to the state  
2 that do these things, for instance, the hole in the ground  
3 there and all the other unplugged holes will --

4 MS. GIEDD: Objection, Mr. McCahren. This needs to be  
5 a question. Mr. One Feather will have a chance to make a  
6 statement later.

7 CHAIRMAN McCAHREN: I was hoping you would get to a  
8 question of the witness.

9 Q. (BY MR. ONE FEATHER) That was my question about that.  
10 Wait. My question, though, okay, I went around it. You guys  
11 didn't really consider Powertech itself, right, just other than  
12 the surety bond, no historic data on them?

13 A. Well, I would just like to point out that those mines  
14 were before law came into effect, premining law, and today we  
15 hold a surety bond for the reclamation of any project.

16 Q. But you don't -- you just took the application without  
17 considering the historic perspectives of Powertech or its  
18 management staff or anything like that. You just -- so they  
19 have their complete application.

20 A. Well, Powertech submitted a certification of applicant  
21 form and that's pretty much their legal document saying this  
22 reclamation plan, all the information is proven to be true.

23 CHAIRMAN McCAHREN: What he's trying to ask you is,  
24 are they in violation anywhere else?

25 A. No, they are not. Not that I'm aware of.

1           CHAIRMAN McCAREN: Ms. White Face, do you have a  
2 question of the witness?

3           MS. WHITE FACE: Yes, I do, thank you.

4                                   CROSS-EXAMINATION

5 BY MS. WHITE FACE:

6           Q.    In your testimony, you said an exploration hole is  
7 similar to a water well.

8           A.    Correct.

9           Q.    Can --

10          A.    The drilling of the hole. Most water wells are cased.  
11 In this instance, the exploration holes won't be cased, and  
12 immediately after logging of the hole, they will be plugged.

13          Q.    Can a water well be polluted by some outside source or  
14 can an exploration hole then be polluted in the drilling  
15 process, the water?

16          A.    Hypothetically, yes. I can't say no to that, if there  
17 was a big possible -- a fuel spill or something like that, but  
18 Powertech has stated in documents that they submitted to the  
19 department that they plan on keeping drilling fluids, drilling  
20 cuttings in the hole and this would provide a barrier between  
21 the aquifer and possible outside contamination.

22          Q.    In one of these documents that we received today, it  
23 says in there that uranium in essence liquidizes in an  
24 oxidizing situation, meaning with water or meaning with acid.  
25 So if we had a heavy rainfall, the uranium in essence could

1     liquify just from the water; is this true?

2             A.    I believe not.  Uranium actually becomes mobilized in  
3     a highly oxygenated condition.

4             Q.    That's what I'm asking.

5             A.    I don't think a rainfall really could do that.  I  
6     don't believe so, and Powertech would probably submit testimony  
7     on that.

8             Q.    Do you know what is the average rainfall in this area,  
9     in this area where they plan on exploring?

10            A.    I believe 14 to 16 inches a year.

11            Q.    In your testimony, you talked about what will  
12    Powertech do with the water -- the question was asked what will  
13    Powertech do with the water after it's pumped out.

14            A.    Right.

15            Q.    And you said you didn't know.

16            A.    Well, they will either put it in a lined discharge  
17    pond for evaporation or possible water treatment or obtain an  
18    EPA aquifer reinjection permit.

19            Q.    Do they have to obtain that permit prior to -- before  
20    this permit is given?

21            A.    Actually, Powertech can go to the Water Rights Program  
22    and obtain a temporary water rights permit and conduct this  
23    pumping test without an exploration permit.

24            Q.    You also in your testimony said you guessed at what  
25    Powertech would do with the water once they pumped it out.  How

1 much water is going to be pumped out? You said 20 gallons per  
2 minute for 72 hours. What does that total?

3 A. Well, Powertech plans to do either from 48 to 72  
4 hours. This is to be determined. And they plan on bringing  
5 the specifics to the department and they will discharge this  
6 water to a lined facility or possibly reinject the water. They  
7 don't plan on using the water in their industrial, any  
8 industrial processes.

9 Q. Now, from the information that we were given on this  
10 water that they tested and it shows real high levels, okay?

11 A. Okay.

12 Q. If they leave that in a pond, say a deer or an  
13 antelope comes walking by and they see that, because radiation,  
14 you can't taste it, you can't smell it, you can't feel it, a  
15 deer or antelope comes walking by and drinks that water in that  
16 pond.

17 A. Okay.

18 Q. What will happen?

19 A. Well, actually, that's addressed in Game, Fish & Parks  
20 recommendations. Please consult with Game, Fish & Parks if  
21 ponds are constructed to contain produced water during  
22 exploration --

23 CHAIRMAN McCAHREN: Slower, she's gotta take it down.

24 A. -- to contain produced water during exploration  
25 drilling or pump tests. Maybe Stan Michals with the Game, Fish

1 & Parks might be better to address this. He might require some  
2 type of animal game fencing to be installed around these ponds.  
3 If Powertech wants to discharge this water, we require sampling  
4 and if doesn't meet the South Dakota surface water discharge  
5 standards, they can't discharge it to the environment.

6 Q. (BY MS. WHITE FACE) If all of a sudden we got a heavy  
7 rainfall, I know the weather all over the country today is  
8 really not -- it's aberrant, it's not acting in its usual  
9 manner. What if we get a real heavy rainfall, they have a pond  
10 there, and I read from their application that it will only be  
11 10 inches deep, and it floods out, it's going to affect this  
12 creek, it's going to affect other wildlife. Is there any way  
13 that we could insure that that would not happen? Will there be  
14 berms or something built around these holding ponds?

15 A. In other permit matters, the department usually  
16 establishes a freeboard water level, usually a couple feet just  
17 in the instance of like a heavy precipitation or a PMP event.

18 Q. You talked about the reclamation plan and you talked  
19 about dozers will regrade, they will seed, they will mulch.  
20 The drill rigs would be probably driven across land surfaces  
21 because no roads would be built.

22 A. Okay.

23 Q. Now, Mr. Fort asked a question and I'm asking this  
24 question. You said that there were no historic sites there.

25 A. Not that we noticed in the exploration area. We did

1 not -- Powertech did not receive any documentation from surface  
2 owners stating that there were.

3 Q. Okay. However, Native Americans have been here longer  
4 than the surface owners were. We might know of other historic  
5 things that happened there. Now, the other question that I  
6 want to ask is do you know the difference between an  
7 archaeological site, a historic site, a sacred site and a  
8 burial site?

9 A. You know, from observation, I guess I could say I  
10 would.

11 Q. Okay, could you tell me what is the difference between  
12 an archaeological site and a sacred site?

13 A. Well, I guess I wouldn't know the answer to those two.

14 Q. What about --

15 A. What you would consider sacred, that's more of a --

16 Q. There is actually -- we have actual physical things  
17 for a sacred site. What about the difference between an  
18 archaeological site and a burial site?

19 A. I guess I don't know the answer to that.

20 Q. Okay, your state archaeologist, also I would like  
21 to -- if he would be here, I would like to ask him if he knows  
22 the differences between those four things because there is a  
23 difference, a definite difference. And that's where his  
24 question is asking were Native Americans, and we have tribal  
25 historic preservation officers at Standing Rock and at Rosebud

1 Sioux Tribes who both could have been consulted on this, as the  
2 Black Hills are known burial site and sacred site places and  
3 historic sites for us. But there is a big difference between  
4 archaeological sites, sacred sites, historic sites and burial  
5 sites. So that's what I was wondering about. And why I'm  
6 concerned is because the drilling could hurt that, but also  
7 driving across land where there is no road. You talked about  
8 plugging flowing artesian wells. In the plugging process,  
9 would that -- of an artesian well -- first of all, do you know  
10 if there are any, the artesian wells, what formation are they  
11 in?

12 A. Those would be the Lakota and Fall River formations,  
13 because these exploration holes are going to be approximately  
14 500 to 600 feet in depth and they are targeting a certain area.

15 Q. But doesn't an artesian well, can't it, because of an  
16 uplift, flow out of another place further away?

17 A. Well, the Mowry shale is located above these  
18 formations and below these formations is the Fuson shale, so  
19 it's slightly confined between two shale units.

20 Q. Are there uplifts within the Black Hills and within  
21 this specific area?

22 A. Actually, the specific area is generally flat.

23 Q. But there are uplifts.

24 A. Well, in the Black Hills area, there are uplifts.

25 Q. I mean underneath where this place is at, geologically

1 underneath the ground there could be faults and -- what do they  
2 call those things --

3 MR. FORT: Is this right next to the Elk Mountains?

4 A. There could possibly be faults, but due to the  
5 topography, geologic conditions and past reports, predominantly  
6 flat layers.

7 Q. (BY MS. WHITE FACE) I'm curious about why didn't an  
8 independent sample on back water quality, a current one be  
9 taken? Why didn't the department require an independent sample  
10 rather than having Powertech sample the water? Because it  
11 leaves the question open of if Powertech needs to show that  
12 there is so many picocuries or so much uranium in the water,  
13 they need that, they need that kind of information. So I'm  
14 wondering, why was an independent water sample not taken?

15 A. Well, these water samples were signed and if they were  
16 contaminated by Powertech, there would be a legality issue.

17 Q. I'm curious why the department never considered having  
18 an independent water sample done for back.

19 A. Independent?

20 Q. Yes.

21 A. This was to obtain background data.

22 Q. I know it was to obtain background data, I know that,  
23 but why wasn't an independent company asked to do this?

24 A. Well, there's a lot of costs associated with this  
25 sampling and it's also not the state statute.



1 Q. You said -- I noticed that in Game, Fish & Parks  
2 report, they keep talking about raptors. Raptors could be  
3 eagles, they could be hawks, raptors, birds.

4 A. I wouldn't be the one to ask about that.

5 Q. Okay. Did you ever hear of the Dakota Skipper?

6 A. No, I have not.

7 Q. The Dakota Skipper is an endangered butterfly in this  
8 area. That's all the questions I have. Thank you.

9 CHAIRMAN McCAHREN: Ms. Larson, do you have any  
10 questions of the witness?

11 MS. LARSON: No. Not at this time.

12 CHAIRMAN McCAHREN: Ms. Lambert?

13 CROSS-EXAMINATION

14 BY MS. LAMBERT:

15 Q. How is it determined that if there is or isn't uranium  
16 in these wells, is that in with the fluids or how is that  
17 determined?

18 A. That uranium was total recoverable in the sample.

19 Q. So that means that bringing it up, that sample, that's  
20 how they know?

21 A. Correct.

22 Q. What I find interesting is that in the exploration  
23 plan, there are quite a few comments about pollution, drilling  
24 fluids, water discharge, injecting pumped water, reinjecting  
25 pumped water, affected land, leaching solution, if it does not

1 meet stock watering quality standards. These are the same as  
2 when you are mining, so his question was and my question is,  
3 how is exploring different from mining?

4 A. No mining is allowed under this permit, just the  
5 drilling of 155 exploration holes, which will be plugged and  
6 the sites will be reclaimed. That is the only thing allowed  
7 under this permit.

8 Q. Okay. But is it true that the same kinds of pollution  
9 happen when you are exploring as when you are mining?

10 A. I would say not. In the mining process they use  
11 lixivants and other fluids to extract the material. Here they  
12 are not putting anything into the ground. They are strictly  
13 drilling the holes, obtaining some core samples and after they  
14 log it with their tools, they are going to plug the hole.  
15 Mining is not allowed under this permit.

16 Q. But they have to use -- they have to use -- what's the  
17 word I want -- I'm going to use the word poisons, they have to  
18 use poisons in order to determine whether there is uranium down  
19 there.

20 A. Well, they take out the core samples and then they  
21 will take it to a lab to be identified. It's called like wet  
22 assaying is I believe the process they will be using. They  
23 probably could speak on this more when they get up to testify.  
24 They will take the core sample, do destructive tests on it  
25 where they crush and grind the material, probably mix it with a

1 solvent, most likely a hydrochloric or sulfuric acid. Then  
2 after this process, they will mix in a reagent. From this they  
3 put in a spectrometer, will heat the material to incandescence  
4 and during that incandescence, different light shades come off  
5 depending on what element is in the sample. Cyanide is red  
6 color, sodium is like a double band yellow. Yeah, they are not  
7 going to be inserting any fluids into the formation.

8 Q. But that does go back in if you are going to be  
9 injecting this stuff back into the -- injecting --

10 A. The core samples they will be removing aren't going  
11 back into the ground.

12 Q. Okay.

13 CHAIRMAN McCAHREN: That's all? Mr. White Eyes, do  
14 you have anything?

15 MR. WHITE EYES: Yes, I have a question here.

16 CROSS-EXAMINATION

17 BY MR. WHITE EYES:

18 Q. About this reclaiming, from the very beginning on this  
19 uranium exploration, Mr. Macy, can you clarify why didn't they  
20 reclaim it at the time?

21 A. Excuse me? Are you talking about the current sites?

22 Q. Uh-huh. Right now that's an open pit uranium mine.

23 A. Those mines were developed before mining regulations  
24 were in place. Now the regulations, we have statutes,  
25 different laws and we can hold a surety bond, which will

1 reclaim the entire area if the mining company would go  
2 bankrupt, but that's a past issue.

3 Q. That past issue is very dangerous to me, because our  
4 people, from this uranium -- first let me read this, because I  
5 read this last year when we had this and I'm pretty sure  
6 everybody is aware of it. Native North America, the Political  
7 Economy of Radioactive Colonialism. Okay, this was an order by  
8 Nixon, President Nixon, an executive order where it says a more  
9 candid and accurate appraisal of the situation at Navajo and  
10 Sioux Nation, in view both of current circumstances and of  
11 development projections, came from the Nixon administration in  
12 1972. At that time, in conjunction with studies of U.S. energy  
13 development needs and planning undertaken by the Trilateral  
14 Commission, the government secretly termed and sought to  
15 designate both the Four Corners region and the impacted region  
16 of the Dakotas, Wyoming, and Montana as National Sacrifice  
17 Areas.

18 MS. GIEDD: Objection, Mr. McCahren, this is not a  
19 question. He will have a chance to testify later.

20 CHAIRMAN McCAHREN: I'm aware of that. You are  
21 supposed to be asking him a question. If you want to testify,  
22 you can do it later, sir. You want to know if he's read that,  
23 is that the question? It is.

24 A. I have read that. When I was at that uranium summit  
25 back in August, you actually gave me that pamphlet and I did

1 read that. I believe it was by Ward Churchill who wrote that  
2 article.

3 COURT REPORTER: I need a copy of that, please.

4 CHAIRMAN McCAHREN: Do you have further questions,  
5 sir?

6 MR. WHITE EYES: I don't agree with -- I'm opposing  
7 this whole uranium situation because my wife died of cancer and  
8 I am a cancer victim, I have colon cancer that's treated, but  
9 it's still in my system, I know, because you cannot get rid of  
10 that. That's all I have. Thank you.

11 CHAIRMAN McCAHREN: Thank you. Ms. Four Horns?

12 MS. WHITE FACE: We have to interpret. Not yet, no.

13 CHAIRMAN McCAHREN: None?

14 MS. WHITE FACE: No.

15 CHAIRMAN McCAHREN: Mr. Putnam?

16 MR. PUTNAM: No.

17 CHAIRMAN McCAHREN: Cross, redirect.

18 MS. GIEDD: I do not have any redirect, Mr. McCahren.  
19 The state would rest.

20 CHAIRMAN McCAHREN: Thank you. Mr. Main. We are  
21 going to have a brief recess.

22 (Whereupon, the hearing was in recess at 3:48 p.m.,  
23 and subsequently reconvened at 3:58 p.m., and the following  
24 proceedings were had and entered of record:)

25 CHAIRMAN McCAHREN: We will come to order. Mr. Main,

1 you are going to present your case.

2 MR. MAIN: Yes, Mr. Chairman. I call Frank  
3 Lichnovsky.

4 Thereupon,

5 FRANK LICHNOVSKY,  
6 called as a witness, being first duly sworn as hereinafter  
7 certified, testified as follows:

8 DIRECT EXAMINATION

9 BY MR. MAIN:

10 Q. Please state your name.

11 A. Frank Lichnovsky.

12 Q. And would you spell your last name?

13 A. L-I-C-H-N-O-V-S-K-Y.

14 Q. Where do you live, Mr. Lichnovsky?

15 A. In Hot Springs, South Dakota.

16 Q. By whom are you employed?

17 A. Powertech USA, Incorporated.

18 Q. What is your position with Powertech?

19 A. Chief geologist.

20 Q. You stated that you live in Hot Springs. Does  
21 Powertech also have a separate commercial office in Hot  
22 Springs?

23 A. Yes, we do, it's in the old library building there.

24 Q. What is your education, Mr. Lichnovsky?

25 A. I have a BS in geology from Sul Ross State College in

1 Texas.

2 Q. Do you hold any registrations?

3 A. Yes, I'm a registered professional geologist in the  
4 state of Wyoming and a registered professional geoscientist in  
5 Texas and I'm registered with the SME as a geologist.

6 Q. Could you briefly describe to the board your  
7 employment history prior to going to work with Powertech?

8 A. I've been in uranium for approximately 40 years. I've  
9 worked at seven in-situ mines, three of which have been  
10 restored and released back to the original landowners, the  
11 bonds have been released. I have done exploration, put in well  
12 fields and did some supervision of mining. I've worked for  
13 many companies, majors, Conoco, Westinghouse.

14 Q. Have you prepared an exhibit that is a resume' of your  
15 education and work experience?

16 A. Yes, I have.

17 Q. And is that included with other exhibits that we will  
18 be introducing here today?

19 A. Yes, it is.

20 Q. Have you had direct experience supervising the type of  
21 uranium exploration that Powertech proposes to do under this  
22 permit application?

23 A. Yes, I have.

24 Q. Let's talk now specifically about Powertech's  
25 activities in South Dakota in the Dewey-Burdock area. Where

1 generally is this Dewey-Burdock area?

2 A. It's approximately 13 miles northwest of Edgemont and  
3 extends from there to about 20 miles north of Edgemont.

4 Q. And you have got a slide up on the screen there. Is  
5 that a slide you prepared or caused to be prepared?

6 A. Yes.

7 Q. And likewise did you cause other slides to be prepared  
8 for your presentation here today?

9 A. Yes. Is there someone to bring the bottom down?

10 MS. GIEDD: Mr. McCahren, if I can interrupt, I just  
11 realized I forgot to offer Exhibit A, which is the set of  
12 PowerPoint presentations. May I offer it at this time?

13 CHAIRMAN McCAHREN: You may. Is there any objection?

14 MR. MAIN: No objection.

15 CHAIRMAN McCAHREN: Hearing none, it will be received.

16 EXHIBITS:

17 (DENR Exhibit A received into evidence.)

18 CHAIRMAN McCAHREN: Does anybody want one of these  
19 that didn't get one?

20 MR. MAIN: We gave to all of the intervenors and the  
21 department and I don't have any more.

22 CHAIRMAN McCAHREN: Share back there, can you?

23 MS. HILDE: Here is one, we can share.

24 Q. (BY MR. MAIN) The slide that you have up on the  
25 screen now, Mr. Lichnovsky, does that correspond to Exhibit 2



1 in the booklet?

2 A. Yes, it does.

3 Q. Then let's proceed, flip to the next one, which is  
4 Exhibit 3 in the booklet, and what does that depict?

5 A. This shows the holdings that Powertech has in the  
6 Dewey-Burdock area. It's approximately 11,000 acres.

7 Q. This corresponds similarly to the maps Mr. Macy  
8 testified about.

9 A. That's correct.

10 Q. Let's flip again to what is Exhibit 4 in the booklet  
11 and what does this Exhibit 4 depict?

12 A. This is called a strat column, it shows the formations  
13 in the western Black Hills. The two yellow ones are the ones  
14 containing uranium, they are the Fox Hills and the Lakota and  
15 they are also aquifers.

16 Q. You said the Fox Hills and the Lakota, do you mean the  
17 Fall River and the Lakota?

18 A. The Fall River and the Lakota.

19 Q. Does all of this lithology from the top down exist in  
20 the Dewey-Burdock area?

21 A. No, it does not.

22 Q. And where does the lithology, the surface start in the  
23 Dewey-Burdock area generally?

24 A. The surface starts in the Skull Creek, which is about  
25 here and extends down.

1 Q. What happened to the formations above the Skull Creek?

2 A. They are eroded away.

3 Q. Let's look then to the next exhibit and then we will  
4 switch to describing some drilling. What is this exhibit,  
5 which is No. 5 in the booklet?

6 A. This is a radiometric log from the Dewey-Burdock area.  
7 You can see that from the surface down is the Skull Creek  
8 carbonaceous shale member, then the Fall River sandstone, then  
9 the Fuson shale, then Lakota sandstone river and the Morrison  
10 shale.

11 Q. And again to point out, what are your objective  
12 formations you want to evaluate?

13 A. The Fall River and the Lakota.

14 Q. Those are sandstones?

15 A. Those are sandstones and aquifers.

16 Q. Now, let's go back to the previous exhibit, it may  
17 help to look at that, but can you describe to the board just  
18 briefly how you drill these exploration holes and what  
19 equipment is used to drill them?

20 A. We use rubber-tired water well rigs. We drive to the  
21 site using existing roads or from the existing road over to the  
22 site, just across the surface. When we get there, there's a  
23 mud pit dug so that the water coming out of the hole goes into  
24 the mud pit, we pick the water back out of the mud pit and  
25 reinject it or circulate it down the hole.

1 Q. How big is this mud pit?

2 A. It's approximately 12 by five feet and up to six feet  
3 deep, six to 10.

4 Q. The first thing that's done is a mud pit is dug?

5 A. That's correct.

6 Q. And then do you have to level the site or anything  
7 like that?

8 A. No. The rigs have jacks so we can use the jacks to  
9 level the rig.

10 Q. How big are these rigs? Are these big like oil well  
11 rigs?

12 A. No, they are small, they are 30 feet long, they are  
13 small, just truck-mounted rigs, portable rigs.

14 Q. Then how is the hole drilled? What's used?

15 A. There's a rock bit on the end or drag bit, a rock bit  
16 has teeth and as you turn it, it chips the formations and the  
17 water comes down the pipe, washes the samples out from the  
18 bottom up to the surface on the outside of the pipe and into  
19 the pit, then we pick that water up and recirculate it back  
20 down.

21 Q. What's in this fluid that goes down the center of the  
22 pipe and then out the bit and up the sides?

23 A. We add sodium bentonite shale, it's the bentonite  
24 that's found on the surface in the Black Hills.

25 Q. Sometimes would be called clay?

1 A. Yes.

2 Q. And this liquid comes out, goes into the mud pit and  
3 then it's sucked back out of there and reinjected down the  
4 center of the pipe again?

5 A. Yes.

6 Q. So you continue to use the same fluid.

7 A. Yes.

8 Q. What's your job on site while the drillers are  
9 drilling these holes?

10 A. I normally do the lithology. I have them collecting  
11 samples usually, but I will also get down there and collect  
12 samples. We use a tea strainer, stick it in the water coming  
13 out of the hole, it fills, the samples fill into the tea  
14 strainer and bring it out, we put them on the surface in rows  
15 so that they are there for me to look at later and I can  
16 examine them and determine what we are drilling in and where we  
17 are.

18 Q. You can take those samples and know what formations  
19 you have drilled through?

20 A. Yes.

21 Q. Once you get down to in this case the Lakota or get  
22 into the Morrison formation, do you drill any further?

23 A. No. Once we get into the shale, we stop.

24 Q. About how deep is that going to be?

25 A. Twenty feet is the most.

1 Q. But say total depth.

2 A. Total, an average of 500, somewhere between 400 and  
3 600 they will range.

4 Q. Below the surface?

5 A. Below the surface.

6 Q. Once you get to total depth, what's the next procedure  
7 that you will supervise on site?

8 A. They will pull the pipe out of the hole and then we  
9 run the probe in and the probe is just a two-inch metal probe  
10 about four or five feet tall, it consists of SP, resistivity  
11 and gamma ray or scintilometer. The SP measures the electrical  
12 potential of the rock as it goes down. The resistivity, we  
13 inject electric current and measure the resistance where we  
14 encounter as we go down in the different rocks, sandstones  
15 being more resistant, shales being less resistant, which is on  
16 the other log.

17 Q. Let's flip to the next one, which is slide five.

18 A. You can see this is shale and it varies towards the  
19 center of the log.

20 Q. You are looking at the very right hand line there.

21 A. Yes.

22 Q. You might be able to follow along in the booklets if  
23 it's hard to see there. What's that measuring?

24 A. It's measuring resistance and it's more resistant --  
25 less resistant so it comes over to the left more. As you hit

1 the sands, they are more resistant and they veer over to the  
2 right. So you can see there's sands, there's the shale,  
3 there's more sands, another shale, sands, shale and another  
4 sand, so we can tell what we are in by the characteristics of  
5 the log.

6 Q. And that's the resistivity log?

7 A. That's the resistivity.

8 Q. Or line on that log anyway.

9 A. That's correct.

10 Q. Shifts to the right for sandstone.

11 A. That's correct. We use the gamma -- it's essentially  
12 a down hole scintilometer, Geiger counter.

13 Q. What's the left hand line on this log?

14 A. This one?

15 Q. Yes.

16 A. That's showing the gamma in the hole and right there  
17 you can see we had a little ore or mineral.

18 Q. So when that goes to the right, what does that  
19 indicate?

20 A. That indicates the grade or the percent of uranium.

21 Q. Further to the right, the more, the better the grade?

22 A. Right.

23 Q. And what's the center line? There's three lines on  
24 this. What does that center line show?

25 A. That center line is the SP and it's measuring a

1 natural potential of the formations.

2 Q. Why do you measure that?

3 A. It helps -- as you can tell, this is not a very good  
4 log, but usually they show the sand just like that, it varies,  
5 too.

6 Q. When the hole is logged to get this information, where  
7 is this paper log printed out at?

8 A. It's printed out in the truck, just as he lowers the  
9 probe to the bottom and logs on the way back out and he's  
10 actually got a screen and I can stand behind him and watch it,  
11 but when he finishes, he just prints the log out and hands it  
12 to me.

13 Q. Usually just go down once with the probe and come back  
14 up?

15 A. That's correct.

16 Q. What happens next with regard to that test hole?

17 A. We run the pipe back in and start thickening our mud  
18 for plugging the hole.

19 Q. When you say pipe, you mean drill stem?

20 A. Drill stem, yes.

21 Q. So you run that back in.

22 A. To the bottom.

23 Q. And then when you say thicken the mud, how do you do  
24 that?

25 A. You add more bentonite and just keep adding it till it

1 gets to the thickness you need.

2 Q. You just put the bentonite into the mud pit?

3 A. Yes.

4 Q. And pull out of there and push it down the middle of  
5 the pipe?

6 A. That's correct, and by circulating, that mixes it very  
7 well.

8 Q. The drill stem is then gradually pulled up to the  
9 surface?

10 A. Yes, then we pull the drill stem out and top off the  
11 hole because as you pull the drill stem out, you remove some of  
12 the volume, so when you pull it out, you top off the hole again  
13 with the drill mud.

14 Q. What's your next step in plugging then?

15 A. Then you will have to put a five-foot cement plug on  
16 top of that drill mud and you leave three foot above to be  
17 filled with topsoil so that if they ever plowed or something,  
18 you wouldn't hit the cement.

19 Q. About how long will any one of these test holes be  
20 left open in order to log it and before you get it filled in  
21 again?

22 A. Oh, an hour, two hours.

23 Q. What do you do with the mud pit? How do you reclaim  
24 it?

25 A. It's best to let it dry a day or two, to let the water



1 evaporate and soak out and then fill it with some fluid to help  
2 soak up the rest of the water, mound it a little bit so that as  
3 it subsides, it will level out, then you level again, then you  
4 put the topsoil over it and then seed it.

5 Q. When this mud pit is dug, the topsoil is scraped off  
6 and set aside separately?

7 A. Yes.

8 Q. Then put back on at the end?

9 A. Yes.

10 Q. When do you plan on seeding the tops of these mud  
11 pits?

12 A. The soil conservation has recommended spring and fall.

13 Q. I believe is it a condition recommended by DENR that  
14 we -- that Powertech follow those recommendations?

15 A. Yes.

16 Q. We had flipped ahead to this slide number six and  
17 maybe while we are talking about drilling, the technique of  
18 drilling, this would be a good one for you to explain. What  
19 does that depict?

20 A. This depicts the formation of the uranium. Overlying  
21 the area in the past was the White River formation, which was a  
22 volcanic ash from Yellowstone and as it was eroded, the uranium  
23 was carried down dip in the sandstone by rain water. Once it  
24 encounters reduced ground, it precipitates into a narrow ore  
25 body, which we call roll fronts. This is a natural process, it

1 goes on with more uranium being carried down and this very  
2 slowly moves, millions of years it takes to move and  
3 precipitate there.

4 Q. You say uranium from volcanoes at Yellowstone. You  
5 mean when Yellowstone Park was an active volcano?

6 A. That's correct. It deposited many feet of ash over  
7 the whole area.

8 Q. Which had uranium in it.

9 A. That's correct. As you will notice, we have a  
10 confining shale above and below the sand.

11 Q. And is that those shale formations you talked about on  
12 those previous exhibits?

13 A. Yeah, the Skull Creek and the Morrison.

14 Q. When these test holes are drilled, Mr. Lichnovsky, and  
15 initially they are opened so the probe is going down or even  
16 while they are being drilled, does radon gas escape from these  
17 holes?

18 A. Probably a very miniscule amount. It's very, very  
19 minor, it couldn't even be measured and there's no danger to  
20 the drillers even. It just dissipates in the air and it's so  
21 minor and our drilling mud is designed to filter into the  
22 formations and keep that gas and water from entering the hole  
23 anyhow. We are circulating constantly, there is no buildup of  
24 the gas in the hole.

25 Q. How many test holes are you planning on drilling?

1 A. 155.

2 Q. Are there any domestic or stock water wells right in  
3 the areas you are going to be drilling?

4 A. Yes, there is some stock water wells, but the drilling  
5 will stay a quarter of a mile away from them and the domestic  
6 wells are over a half a mile away.

7 Q. Say in your actual drill areas, are there any water  
8 wells in those areas?

9 A. Just stock wells, the domestic wells all fall outside.

10 Q. Within the areas you are actually drilling.

11 A. In the areas of drilling, no, there is not.

12 Q. Closest stock watering well will be how far away?

13 A. A quarter of a mile.

14 Q. Did the Department of Environment and Natural  
15 Resources ask Powertech to sample some of these domestic water  
16 wells?

17 A. Yes.

18 Q. How did you have that sampling done?

19 A. We hired an independent environmental guy, engineering  
20 guy, he came out, I took him to each location, he took the  
21 samples and had custody of them at all times. I never had  
22 control of those samples. He mailed them into the lab, they  
23 were sent in to an independent lab, Energy Laboratories in  
24 Rapid City for analysis.

25 Q. And what was the name -- what is the name of the man

1 who took the samples?

2 A. It's Scott Allen from Custer.

3 Q. Is he an employee of Powertech?

4 A. He is not. He used to work for the state I  
5 understand.

6 Q. When these test holes are drilled as you have  
7 described, are they ever pressurized to force something out of  
8 the hole into any formations?

9 A. No, there is no pressure.

10 Q. There's been some talk of possibly encountering  
11 artesian water. If you do encounter artesian water, what  
12 pressures are you expecting?

13 A. There were low pressures, the water will barely flow  
14 out, two, as Marc said, to 10 gallons a minute. They are very  
15 low.

16 Q. How do you control that artesian flow? How do you  
17 stop it?

18 A. We will thicken our mud and you have the weight of the  
19 water in your hole to push down on it, plus you thicken the  
20 mud, you add more weight and that will keep that water forced  
21 back.

22 Q. There's also been talk that there's been -- there's  
23 been comments there's been a large number of test holes already  
24 drilled in this area.

25 A. Yes.

1 Q. And so why do you need to drill another 155 test  
2 holes?

3 A. We want to characterize the formation and test for  
4 hydraulic conditions in the formation and plus I was charged  
5 with finding more ore, so I need to explore for more ore.

6 Q. Do you have the data from those 4,000 test holes?

7 A. No, we do not.

8 Q. The department, Mr. Macy has testified that they have  
9 calculated a reclamation surety amount of \$213,500. You are  
10 aware of that.

11 A. Yes.

12 Q. And have you reviewed their calculations?

13 A. Yes.

14 Q. Does Powertech agree to post that amount of  
15 reclamation surety?

16 A. Yes.

17 Q. My understanding is that's an amount of money that  
18 would plug all 155 holes; is that correct?

19 A. That's correct.

20 Q. Will all 155 holes ever be open at one time?

21 A. No.

22 Q. How many holes will be open at one time?

23 A. At the most, 10 in the pump test.

24 Q. The department has also proposed conditions that Mr.  
25 Macy has testified about as his Exhibit F or the department's

1 Exhibit F within their Exhibit B. Have you reviewed those  
2 conditions?

3 A. Yes.

4 Q. And does Powertech agree with those conditions?

5 A. Yes, we agree to them.

6 Q. Lastly, let's scroll ahead to your final two exhibits,  
7 two or three exhibits, Mr. Lichnovsky.

8 A. That one?

9 Q. Let's go back to -- let's go back one more. Can you  
10 just briefly tell the board what does that show?

11 A. That's showing the roll fronts. This is the Lakota.  
12 That shows the Lakota roll front and the Fall River roll front.  
13 That's showing them as they are looking down on them in plan  
14 view. If you will notice back here, there is some fronts  
15 behind the main trend, those are what I'm going to be  
16 exploring. They just barely drilled them, so I'm going to be  
17 drilling them more heavy to see if there's more ore along them.

18 Q. If we can go to the next exhibit. What does this  
19 exhibit show?

20 A. This shows where I had planned to drill in the area  
21 and how many holes in each area.

22 Q. These are going to be the locations of your drill  
23 holes?

24 A. That's right.

25 Q. And then lastly, the final exhibit, which is No. 9.



1 exploration operation?

2 A. No.

3 Q. You indicated I think that you did not have the  
4 exploration data from other sources that have been gathered in  
5 the past for this area; is that right?

6 A. That's right.

7 Q. Did you look for it? Do you know where it is?

8 A. We know where it is. We have contacted them and we  
9 are trying to get it.

10 Q. What company is it?

11 A. I don't remember, I'm sorry.

12 Q. Do they consider it proprietary information?

13 A. They consider they own it.

14 Q. Are you familiar with the letter of credit that  
15 Powertech is submitting for its surety?

16 A. No, I'm not.

17 Q. One thing I wanted to talk about, in your pump tests,  
18 there will be some produced water from the formation.

19 A. Yes.

20 Q. What are you doing with that water?

21 A. We will either put it in lined ponds, we will probably  
22 put it in lined ponds and then inject it after the test is  
23 over, if it's approved.

24 Q. And you will have to get an -- it's your understanding  
25 you will have to get an injection permit in order to reinject



1 that water?

2 A. That's correct.

3 Q. And if you do not get the injection permit, how do you  
4 propose in dealing with that produced water?

5 A. We will either treat it so we can dispose it or we  
6 will let it evaporate.

7 Q. Then after it evaporates or after you inject it, you  
8 will reclaim the site in the same fashion as the other drilled  
9 wells?

10 A. That's correct.

11 MS. GIEDD: Thank you. That's all I have, Mr.  
12 McCahren.

13 MR. FORT: I have some questions.

14 CROSS-EXAMINATION

15 BY MR. FORT:

16 Q. Mr. Lichnovsky, you were mentioning, I'm not sure I  
17 got it straight, that Powertech has been in existence for two  
18 years.

19 A. Approximately, I think.

20 Q. What kind of business were they in before?

21 A. The company was formed to mine uranium.

22 Q. So this is a new company?

23 A. Yes.

24 Q. I see. In other words, they have previous experience  
25 in uranium.

1           A.    Our employees do, does have experience in mining  
2 uranium.

3           Q.    Powertech does have experience?

4           A.    Yes.

5           Q.    You referred to some neighboring wells, the stock  
6 wells I think were within a quarter of a mile, and maybe a  
7 domestic well within a mile. Do you know what's the source of  
8 water for those wells?

9           A.    The Fall River and Lakota sandstone.

10          Q.    That is the same as where you are going to explore?

11          A.    That's correct.

12          Q.    One other question. I notice that you were with the  
13 Wyoming Mineral Corporation from 1978 to 1981. Were you just  
14 involved in the exploration there?

15          A.    No, I was involved in all their in-situ mines and  
16 exploration.

17          Q.    Did those mines -- now, you left in 1981. Did those  
18 mines in Texas and in Wyoming, did they continue on?

19          A.    They did for a while. The two in Texas has been  
20 reclaimed and the bond money released and the one in Wyoming,  
21 I'm not sure of -- it's in reclamation, I'm not sure how far  
22 along they are.

23          Q.    Do you know if any of those mines have had any  
24 problems with water?

25          A.    I'm not sure what you mean by problems with water.

1 Q. Like lowering the water quality in the area.

2 A. No, we have not.

3 Q. You are not aware of anything in regard to the  
4 Irrigarry mine in Wyoming?

5 A. No, I am not.

6 MR. FORT: That's all I have.

7 CHAIRMAN McCAHREN: Charmaine White Face, do you have  
8 questions?

9 MS. WHITE FACE: Yes, I do. Thank you.

10 CROSS-EXAMINATION

11 BY MS. WHITE FACE:

12 Q. In your Exhibit 5, I just wanted a clarification on  
13 the difference between shale and sandstone.

14 A. Sandstone is made up of sand grains, of quartz and has  
15 pore space in between them, that's where the water occurs.  
16 Shale is very fine mud grains, compacted, and it's very  
17 compact, I'm trying to remember the term. It impedes water  
18 flow through it, it almost allows no water to flow through it.

19 Q. You said that the mud pits are 12 by five by six to 10  
20 feet deep?

21 A. Yes.

22 Q. Okay, I was curious about that because on this  
23 application here, on page one, this is the DENR application and  
24 it says this was received September 12th, 2006, it says in here  
25 each drill hole will have a small excavated mud pit that will

1 be approximately 12 feet by five feet by 10 inches.

2 A. It should have been 10 feet.

3 Q. Length, width and depth, but if I was looking at an  
4 application and I saw that, I thought that would be a very  
5 shallow mud pit and when I was reading this, that's what I  
6 thought. Now, six feet or 10 feet is a lot bigger difference  
7 than 10 inches.

8 A. Yes.

9 Q. I hope the board caught that because I caught that  
10 right away. I was wondering 10 inches, I thought 10 inches,  
11 okay, that's not going to do too much, but 10 feet is going to  
12 be a big thing. What do you inject into the wells?

13 A. We do not inject anything, we just circulate water  
14 with sodium bentonite mud in it.

15 Q. What is meant when they say oxidized sandstone and  
16 reduced sandstone, what does that mean?

17 A. It's usually referring to the state of the iron. An  
18 oxidized iron is reddish orange, yellow and it's iron that  
19 contains oxygen in combination. A reduced sand, reduced iron  
20 is an iron that contains a sulfide or sulfate with it and it's  
21 usually gray in color.

22 Q. Contains a sulfate?

23 A. Sulfide or sulfate.

24 Q. If that sulfide or sulfate, then, mixes with water,  
25 does it form sulfuric acid?

1           A.    It can, but our water solutions during mining are  
2 neutral, we maintain them at neutral, pH of seven.

3           Q.    But when you are drilling this hole, then, and you are  
4 putting water in there and you run into these sulfates or  
5 sulfides, it could possibly form a sulfuric acid?

6           A.    No.  It's too -- no, there's not enough oxygen in  
7 there.

8           Q.    The water?

9           A.    Yes, that's right, there's not enough in there to make  
10 it.

11          Q.    From my old high school chemistry, if you mix sulfur  
12 and water, you are going to get sulfuric acid.

13          A.    There's not enough oxygen in the water.

14          Q.    You said Scott Allen was not an employee of Powertech,  
15 he was the one that did the water samples.

16          A.    That's correct.

17          Q.    Was he paid by Powertech?

18          A.    Yes.

19          Q.    You said you don't have the data from the 4,000 test  
20 holes.

21          A.    That's correct.

22          Q.    Are you able to get the data?

23          A.    We are trying to get it, yes.

24          Q.    If you got that data, then, would you have to do these  
25 exploratory holes?

1           A.    Yes, I'm looking for more ore outside of where that  
2 drilling is.

3           Q.    You are looking for more?

4           A.    Yes.

5           Q.    Outside of where the other 4,000 holes were drilled?

6           A.    Yes.

7           Q.    But there is uranium in those other 4,000 holes.  You  
8 don't know, you don't have the data yet.

9           A.    We know it's there, yes.

10          Q.    You know it's there.

11          A.    Yeah.

12          Q.    So if you know it's there, why get more?

13          A.    So we can mine more.

14          Q.    You were asked a question of whenever -- the waste  
15 water that's in the ponds and you need to have an injection  
16 permit.

17          A.    Yes.

18          Q.    And then you were asked what would happen if you do  
19 not get the permit and you said you would either treat it or  
20 dispose of it.

21          A.    Let it evaporate.

22          Q.    Pardon?

23          A.    Let it evaporate.

24          Q.    Or let it evaporate?

25          A.    Yes.

1 Q. But you will treat it, how do you treat it?

2 A. You can run it -- well, I'm not sure what's in the  
3 water right now to know, but we would treat it so it would be  
4 just clean, disposable water.

5 Q. If it had uranium in it, radio nuclides.

6 A. You could always use an RO to clean it.

7 Q. And how would you dispose of it?

8 A. If it's approved, you could dispose -- get a surface  
9 disposal permit and dispose of it on the surface.

10 Q. So you would just let it run off right there?

11 A. Yes.

12 Q. And Beaver Creek is right there.

13 A. No, not close.

14 Q. Beaver Creek I thought earlier DENR said was about a  
15 quarter of a mile away.

16 A. Yes, that's right. The water wouldn't reach it.

17 Q. You are not sure.

18 A. I'm pretty sure it wouldn't reach it.

19 Q. So if you --

20 A. It's not that much water.

21 Q. So if you dispose of it, you would just let this  
22 treated water, this waste water then just run off on the  
23 surface.

24 A. It's not waste water then, it's treated water.

25 Q. After you treat it, you would let it run off.

1 A. Yes. We would have to get a surface disposal permit.

2 Q. A surface disposal permit?

3 A. Yeah.

4 Q. Who do you go to to get that?

5 A. The DENR.

6 Q. You said that you worked for two in-situ leach mines  
7 in Texas?

8 A. Actually, three, four, five mines in Texas.

9 Q. Could you tell us what the names of those were?

10 A. Bruni, B-R-U-N-I, Lamprecht, Trevenio, Vasquez, Rosita  
11 and Kingsville.

12 Q. Rosita and Kingsville?

13 A. Yes.

14 Q. You said that the water was all right after you left?

15 A. Yes.

16 Q. Was the water quality, the baseline requirements by  
17 the State of Texas the same from when you started mining those  
18 ISL mines or did they change them before you finished?

19 A. I think they changed a parameter or two in there.

20 Q. They changed a parameter or two?

21 A. Yeah. It's usually sulfates and chlorides.

22 Q. The state legislature did?

23 A. No, the state Department of Health.

24 Q. The Texas Department of Health?

25 A. Yes. It's returned to its prior use. Whatever it was



1 used for before, it is returned to that same use when we  
2 finished. It's returned to prior use, whatever the water was  
3 used for before we started, it's returned to that same quality,  
4 same use.

5 Q. If the state doesn't relax the standards.

6 A. No, that is the requirement, to return it to its same  
7 use.

8 MS. LAMBERT: Is that in Texas?

9 A. Yes.

10 CHAIRMAN McCAHREN: Whoa here.

11 Q. (BY MS. WHITE FACE) Returned to the prior use?

12 A. Yes.

13 Q. This is in Texas?

14 A. Yes.

15 Q. Is it the same in South Dakota?

16 A. I don't know. I'm sorry.

17 MS. WHITE FACE: That's all I have right now.

18 CHAIRMAN McCAHREN: Who is next here? Harold One  
19 Feather.

20 CROSS-EXAMINATION

21 BY MR. ONE FEATHER:

22 Q. I am kind of interested in like you got all this on  
23 your resume' type thing and I went down to Navajo country not  
24 too long ago, I kind of heard their issues with HRI. They are  
25 really having a big debacle down there and stuff, they are

1 trying to commence their deal and it's been like 20 years or  
2 so. Did you tell these guys or that guy over there, Marc Macy,  
3 about what happened with Hydro?

4 A. That we applied for a mining permit? That's what we  
5 did.

6 Q. Down there, and had all kinds of environmentalists and  
7 Indian tribes and. . .

8 A. We had some opposition, yes.

9 Q. Extreme opposition compared to what we are giving you  
10 guys. And then you say you worked for -- you didn't tell the  
11 board this one, though, huh? You didn't kind of say here is  
12 news clippings, we had some trouble?

13 MR. MAIN: Objection, this is argumentative.

14 Q. (BY MR. ONE FEATHER) I wanted to know if he passed on  
15 the information other than just a little paragraph as to what  
16 he did before, Albuquerque, New Mexico. How about this other  
17 company, URI, were you part of that Goliad, Texas issue down  
18 there?

19 A. I'm not sure what issue.

20 Q. Goliad.

21 A. I'm not familiar with an issue at the Goliad.

22 Q. Just recently I read in the paper -- well, not in  
23 that -- a couple years back they had a ground water issue down  
24 there with the mine and they were trying to vary the ground  
25 water rates or something like that, the standards, because they

1 couldn't reclaim or how you said, put it back to its original  
2 use. Did you share that with these guys or what was going on?  
3 You weren't part of that or is URI a big gigantic --

4 A. No, URI and the Texas Board of Health was involved in  
5 that. Our environmental guy was dealing with them on that  
6 issue.

7 Q. That's one of the ones that didn't -- you guys didn't  
8 reclaim when you were talking. You reclaimed four sites or  
9 something like that.

10 A. Three sites. Those have not been reclaimed, they are  
11 still being mined.

12 Q. And again under pretty -- you didn't tell the board  
13 this one, though, other than what's in here.

14 A. They have my resume', that's all they have.

15 Q. That's all I wanted to ask about. Wait, one more  
16 question. Powertech, I almost forgot, hey, I went to their  
17 site like and there is, what do you call it, a link, a place  
18 called [www.cedar.com](http://www.cedar.com) and then did you ever look at that  
19 yourself?

20 A. Yes.

21 Q. Because I went -- I just heard you say that Powertech  
22 was only in operation in Canada for a couple of years, but yet  
23 I seen that it was like about five or six years that it's been  
24 running, it might even be longer than that. But you are aware  
25 that they made air conditioners at one time, that thing, then

1 all of a sudden they did this total --

2 MR. MAIN: Objection, this is irrelevant.

3 MR. ONE FEATHER: The question I'm trying to get  
4 across is that these issues, you know, with the company itself  
5 could hire anybody, but then the company at one time made  
6 refrigerators or air conditioners. Why the 180? Why didn't  
7 they just make a whole company --

8 MR. MAIN: Objection, this is argumentative.

9 CHAIRMAN McCAHREN: I know it, but I'm waiting for the  
10 question to maybe get an answer. Do you know they made  
11 refrigerators?

12 A. There was a company called Powertech that made coolers  
13 for -- or boilers. See, I don't even know for sure what they  
14 did. But it was bought out and became Powertech Uranium.

15 MR. ONE FEATHER: That's all my questions.

16 CHAIRMAN McCAHREN: Larson. Lambert.

17 CROSS-EXAMINATION

18 BY MS. LAMBERT:

19 Q. Is ore body another word for uranium?

20 A. Uranium occurs in ore bodies. Hopefully, if it's  
21 economical, it does.

22 Q. Does it matter to you folks about these other 4,000  
23 previous test holes? Does it help you? Can you use them?

24 A. If we had the data, yes, yes, we could use that  
25 information.

1 Q. You could expand then to those previous holes you  
2 mean?

3 A. I'm not sure of your question.

4 Q. You can use those holes?

5 A. We can use the information from them in our evaluation  
6 of the deposit.

7 Q. Then that might help you if you want to mine?

8 A. Yes.

9 Q. What are the pollution results or ramifications of  
10 injecting versus evaporation?

11 A. You might pick up some contaminant, but I don't see  
12 how if you injected the water back in. It's just sitting  
13 there. At worst you could get some rain water and dilute it.

14 Q. So it could flow.

15 A. It's water that came out of the formation, you just  
16 put it right back in.

17 Q. Okay. If you say it's treated water that you would be  
18 putting back in or evaporating, what is done with the waste  
19 from treatment?

20 A. You would have to dispose of it at a licensed site.

21 Q. What's in that waste?

22 A. Some radio nuclides, radium.

23 Q. Is your company, is Powertech also in Colorado as well  
24 as Canada?

25 A. Yes, we have a deposit in Colorado also.

1 Q. You are mining there in Colorado?

2 A. No, we are not at present.

3 Q. And you mentioned that there are three restored  
4 in-situ mining operations that you worked with?

5 A. Yes.

6 Q. And the reclamation, you mentioned that perhaps the  
7 state health board relaxed the standards.

8 A. They may have, I'm not familiar with it, the final  
9 reclamation.

10 Q. But that's a possibility, Powertech could request the  
11 State of South Dakota to relax the standards?

12 A. We could, yes. Whether they would or not. . .

13 CHAIRMAN McCAHREN: Mr. White Eyes. Four Horns. Mr.  
14 Putnam.

15 MR. PUTNAM: None.

16 CHAIRMAN McCAHREN: Redirect.

17 MR. MAIN: None, Mr. Chairman.

18 CHAIRMAN McCAHREN: Board members.

19 EXAMINATION

20 BY MR. DeMERSSEMAN:

21 Q. Mr. Lichnovsky, you mentioned and I believe the  
22 picture you have there is from Wyoming, Weston or Crook County.

23 A. It's Weston.

24 Q. Do you have a substantial -- have you done substantial  
25 exploration there already in Wyoming?



1 it.

2 Q. That's a lot of replugging, isn't it?

3 A. Yes.

4 Q. Is that covered in the bond, as far as you know?

5 A. I do not know.

6 MS. GIEDD: If I can respond, Mr. McCahren, that's  
7 part of any future mining operation, not part of this  
8 exploration application.

9 CHAIRMAN McCAHREN: Okay. Anybody else? Thank you,  
10 sir.

11 MR. MAIN: I move the admission of Powertech Exhibits  
12 1 through 9 that are in this booklet.

13 MS. GIEDD: No objection.

14 CHAIRMAN McCAHREN: Any objection? They will be  
15 received.

16 EXHIBITS:

17 (Powertech Exhibit Nos. 1 through 9 received into  
18 evidence.)

19 MR. MAIN: I would also like to mark this.

20 EXHIBITS:

21 (Powertech Exhibit No. 10 marked for identification.)

22 MR. MAIN: I have handed out and the court reporter  
23 has marked this form of letter of credit as Exhibit No. 10 and  
24 I would move its admission also, so it's part of the record. I  
25 know it's not the signed letter of credit, but it will show



1 exactly the terms that have been approved.

2 CHAIRMAN McCAHREN: Have you reviewed it, Ms. Giedd?

3 MS. GIEDD: Yes, we have, and it is consistent with  
4 the last letter of credit we did with Homestake. We insured  
5 that all the terms were the same as the one we did with  
6 Homestake. That's the last letter of credit that the board  
7 issued as a bond.

8 CHAIRMAN McCAHREN: I thought so. He almost said  
9 Homestake once.

10 MR. MAIN: I'm sorry.

11 CHAIRMAN McCAHREN: It's understandable. You have no  
12 objection to No. 10?

13 MS. GIEDD: This form of the letter of credit is  
14 acceptable to the department.

15 CHAIRMAN McCAHREN: It will be received.

16 EXHIBITS:

17 (Powertech Exhibit No. 10 received into evidence.)

18 MR. MAIN: Thank you, Mr. Chairman.

19 CHAIRMAN McCAHREN: With that understanding.

20 MR. MAIN: We just received, I haven't talked with  
21 Roxanne about this, but we just received a letter from the Fall  
22 River County Commissioners supporting this permit application.  
23 I would like to move to add that as part of the comments  
24 received after the deadline, which are already -- there are  
25 some of those in the Department's Exhibit B already. If we are

1 going to receive those, I would move to receive these.

2 MS. GIEDD: Of course they are not submitted for the  
3 truth of the matters asserted in the letters, just that we  
4 received them. With that, I will agree.

5 MR. MAIN: I agree with that.

6 CHAIRMAN McCAHREN: They will be received with that  
7 understanding.

8 EXHIBITS:

9 (Powertech Exhibit Nos. 11 and 12 marked for  
10 identification and received into evidence.)

11 MR. MAIN: There is actually two documents, one is an  
12 agreement with the county for roads and water and the other one  
13 is their approval. Powertech rests.

14 CHAIRMAN McCAHREN: Anybody want to testify over  
15 there?

16 MR. FORT: No questions.

17 CHAIRMAN McCAHREN: No, you can talk. You have stated  
18 your position; is that correct?

19 MR. FORT: I think that I have made myself very clear.

20 CHAIRMAN McCAHREN: Thank you.

21 MR. FORT: I don't believe I have anything further to  
22 say.

23 CHAIRMAN McCAHREN: Charmaine White Face.

24 MS. WHITE FACE: Because of the time, I would ask if  
25 we could continue tomorrow morning.

1           CHAIRMAN McCAHREN: I'm not in charge of that and we  
2 got more going on tomorrow. I can't guarantee it. We are  
3 trying to wrap this up tonight.

4           MS. WHITE FACE: I know you are and if you are going  
5 to stay later, that's fine, too. I didn't know how late you  
6 were planning on staying or anything.

7           MS. GIEDD: My understanding is that Carla has a  
8 problem, has a conflict tomorrow, so we don't have a court  
9 reporter, so we were anticipating that we would proceed tonight  
10 until completion.

11          CHAIRMAN McCAHREN: Or until our dinner reservation.

12          MS. GIEDD: One or the other.

13          CHAIRMAN McCAHREN: Speak now. Or rely on what you  
14 have spoken. Take your pick.

15          MS. WHITE FACE: I have got to say some more things.

16          CHAIRMAN McCAHREN: Okay.

17          MS. WHITE FACE: And I'm not -- I hope that the rest  
18 will also say what they want to say, but for us it's more than  
19 just this procedure here, and this is really hard for us  
20 because what we are doing is when we come to something like  
21 this, we try to operate within the parameters of your  
22 processes, yet we come from another totally different culture,  
23 living in this Democracy, and so it's real difficult for us to  
24 talk about some of these things because our culture has been  
25 exploited so often that when we do bring up issues, say a

1 sacred place, we know that it's going to be exploited. And so  
2 that's why it's real difficult for us. And also we understand  
3 that your perception of our philosophy is like night and day  
4 and so again we have difficulty with this. So I will try to  
5 stay within the parameters of this meeting as much as I can.

6 I am hoping that you will deny this exploratory  
7 permit. There is already 4,000 holes out there. There is no  
8 need for 155 more exploratory holes. There is so much data  
9 already. There is no need for more. And common sense dictates  
10 that when those 4,000 exploratory holes were drilled, there  
11 were many burial sites of our ancestors and many sacred sites  
12 of our ancestors that were destroyed.

13 One of the things I would wish that could happen or I  
14 would like the board to consider is that we need the time and  
15 we need the ability to be able to go out there to look at these  
16 places and to determine if where they actually want to drill  
17 these 155 holes, if they are burial sites, if they are sacred  
18 sites. The historical aspect, that's something we know about,  
19 we would have to go back and talk to and bring to you, but  
20 again, it's one of those things where we don't want our culture  
21 exploited any more than it has already been, and not just  
22 exploited but convoluted and changed, and we never -- it is  
23 never from our side or from our perspective or from our  
24 understanding.

25 And so I would ask if the board would at least give us

1 a chance to be able to go out to these sites so we could see  
2 for ourselves, will they be either driving over a burial site  
3 or sacred site or will they be actually destroying a sacred  
4 site or a burial site in the actual process? Drilling a mud  
5 pit five by 12 by 10 feet deep, that has very great  
6 possibilities of destroying a burial site or a sacred site.

7 Oh, there was a question that I had, but I don't know  
8 if we can get back to this later. I noticed someplace in here  
9 where they talked about in this application, it was a letter  
10 that was sent to Marc Macy from Powertech and it says, on  
11 September 12th, Herman Hex claims are located on land  
12 administered by the BLM, Bureau of Land Management. Powertech  
13 has no plans for exploration drilling on lands managed by the  
14 U.S. Forest Service, but it doesn't say anything about BLM.  
15 Now, if this portion that is on BLM land, that's federal, and  
16 so then that should initiate a federal environmental impact  
17 study, the federal process, the federal NEPA process, and if  
18 that process was implemented, then our questions and our  
19 concerns about sacred sites and historical sites and burial  
20 sites would be brought into that process, which it's not  
21 brought into your process here today. But in this application  
22 and in this correspondence, that question is raised, is there a  
23 need for a NEPA, a federal NEPA process, because that one  
24 person's land is administered by the BLM.

25 A second thing, another thing I would like to have is

1 we also would like a copy of the baseline data on ground water  
2 from the old studies that were taken or that they said they had  
3 from the seventies and eighties. We were wondering, we would  
4 like to have a copy of that and be able to look at it and study  
5 it and see how it compares with this new study that Powertech  
6 did. Because if it does, then is that showing a difference  
7 between 1970 and 2006? Is there any difference? Was that  
8 generated by the 4,000 holes that were drilled before? 4,000  
9 holes -- and were the other 4,000 holes capped? Were they  
10 plugged? How were they capped or plugged, if they were? If  
11 they were not, then are they allowing more pollution to go into  
12 this aquifer?

13           So it raises a bunch of questions and that's why we  
14 would like a copy of the baseline data from the old baseline  
15 ground water data and with this new baseline ground water data,  
16 because we need to find out, of course those 4,000 holes had to  
17 have some kind of impact on this aquifer, but what was it? Is  
18 it going to show up in this baseline data? That's another  
19 thing.

20           And as far as -- let's see. We talked -- in here it  
21 says -- I'm trying to look for this quote that I had from  
22 Powertech. Oh, I did want to say something about the wildlife,  
23 because when they talked about wildlife -- I'm a biologist. I  
24 have a bachelor of science degree in physical science and  
25 biology. I also have postgraduate work in chemistry and

1 microbiology. So one of my major concerns is about the  
2 wildlife and from our culture, you know, so I approach this  
3 from two different perspectives, but from our culture, water  
4 should be pure enough for human beings to drink. If we are  
5 going to require the wildlife to drink it, because then when we  
6 go and eat those animals, if those deer, antelope, whatever  
7 that wildlife is, those ducks or whatever we eat is drinking  
8 radioactive or polluted water, especially with radiation,  
9 radiation goes directly to the muscles and if we are eating  
10 antelope or deer, then we better make sure that the water they  
11 are drinking is not contaminated.

12           And I'm real concerned about this waste water if this  
13 waste water is left to run off into the surface and I'm  
14 concerned about those other 4,000 ones, too. If it goes off  
15 into the surface water, then there are wildlife that drink it.  
16 The Black Hills are historically known to be migratory paths of  
17 antelope and deer come into the Black Hills every fall. The  
18 other thing I mentioned when I was questioning Mr. Macy was  
19 about the Dakota Skipper. The Dakota Skipper is an endangered  
20 butterfly. I know it seems a little bit -- it doesn't seem  
21 important, but butterflies are what used to pollinate a lot of  
22 these grasses and this Dakota Skipper is one of the unique  
23 species for our region here.

24           There is also I know in the Cheyenne River, and  
25 Beaver Creek runs into the Cheyenne River, there is, and I keep

1 thinking it's either a sturgeon or a turtle that is unique to  
2 the Cheyenne River, and right now it is in a very precarious  
3 position because of all the pollution in the Cheyenne River  
4 coming from Wyoming. And if you look at South Dakota's DENR  
5 did a water study, they do show that there is uranium coming  
6 from Wyoming into South Dakota in the Cheyenne River, and I  
7 know that doesn't specifically address this permit application,  
8 but these species, if these permits are allowed to be given and  
9 155 more wells drilled and the waste water runs off, you cannot  
10 say that they could take away all the radiation out of that  
11 water. They are not going to be able to take out all of it.  
12 If it's running into the Cheyenne River, which is already  
13 polluted with uranium from Wyoming, how much more pollution is  
14 there going to be?

15           Defenders of the Black Hills, along with Biodiversity  
16 Conservation Alliance from Larmie, Wyoming, just this year we  
17 filed an application with the federal game, fish & parks for an  
18 endangered species designation for the common old leopard frog  
19 and that leopard frog I would hope is living in that Beaver  
20 Creek, but the members of leopard frog in our region, we  
21 submitted it because the leopard frog are becoming very, very  
22 endangered and it's all due to poor water quality.

23           I am really concerned about this, not just for the  
24 animals we are talking here, he talked about raptors, but  
25 there's more involved than raptors, and for us, from our



1 cultural perspective, we have to speak for those that cannot  
2 speak with these kind of voices and with this kind of language.  
3 That means the animals, the birds, the leopard frogs, the  
4 butterflies also because they are all going to be affected by  
5 this. I'm real concerned about these ponds that are going to  
6 be 10 feet deep now I hear. What about the ducks that land in  
7 there? What about the birds that come and drink that water?  
8 Radiation has no smell, no taste, it doesn't tingle when it  
9 touches your mouth, animals don't know, birds don't know,  
10 insects don't know. They are going to be drinking that, too.

11 In our perspective, we say all our relatives, they are  
12 all our relatives, all those grasses are our relatives that  
13 they are going to be digging up, all of that is related to us.  
14 Those grasses give off oxygen. We start polluting the way we  
15 keep on polluting, we are not going to have anything left to  
16 breathe. I'm sorry, but it's really hard to keep our culture  
17 out of these kinds of things, to try to stay within this  
18 scientific perspective, because we know this earth and we know  
19 all of these animals and all of these things from a very, very  
20 ancient perspective. We have been in this area for more than  
21 13,000 years, for more than 13,000 years.

22 This culture, this American culture has only been here  
23 for a little over 100 and so when we talk about these things,  
24 it's not from some primitive savage point of view, it's from a  
25 very ancient philosophy, and we come here, and there are many

1 more that would support us in this speaking up, speaking up for  
2 all of our relatives, and including the water and including the  
3 air, including the dirt and especially including mother earth.  
4 She is alive and when you drill these holes in her, then you  
5 are hurting her, and I know this is not your perspective, I  
6 know you don't understand this and that's why I'm telling you  
7 this. We come from an ancient philosophy, an ancient  
8 understanding. We know, we lived here for 13,000 years,  
9 because we never destroyed her, we never hurt the water.

10           We drink the same water as the animals. It's clean.  
11 They know how to keep it clean. Cows don't, but I won't talk  
12 about cows. But wild animals, they know how to keep the water  
13 clean, and so I'm sorry, this is real difficult for me, but it  
14 is a very emotional thing for me. Every time I know of the  
15 destruction that's happening any place, any place on mother  
16 earth, but particularly in the sacred Black Hills, the Black  
17 Hills were sacred. They have a sacred aura about them that  
18 goes out 50 miles. You can't count that with a Geiger counter  
19 or measure it with a yardstick, but we do have ways to show  
20 sacred places that we can measure physically.

21           So I'm really hoping that you will consider not giving  
22 them this permit. They already can get data from 4,000 other  
23 holes that have already been previously drilled. Thank you.

24           CHAIRMAN McCAHREN: Thank you. Anyone else? Sir.

25           MR. ONE FEATHER: I'd like you guys to consider what

1 I've been saying about the background of Powertech. You know,  
2 sometimes you gotta kind of look at who comes into these  
3 places, like the Brohm thing, if people kind of look at their  
4 finances, I think they would have seen that they were pretty  
5 much a company teetering on the edge of bankruptcy. My  
6 perspective, too, is like, you know, Powertech. This is the  
7 first time I ever seen these guys. But I do know like HRI and  
8 URI and those things, but I see the connections here. It's  
9 just like hopscotching from one shape or one name to another.

10           The way I see it now is that this issue with ISL  
11 jumped into Canada and it kind of came back into our country  
12 again in a different form but with the same people in those  
13 places. When they had the problems down there, because I  
14 remember when they first had this ISL stuff, I remember how  
15 clean it was supposed to be and how much -- how safe it was  
16 supposed to be for the environment as compared to open pit  
17 mining. And then all of a sudden within the past 10, 15 years,  
18 if you see the problems that they have been having with these  
19 ISL mines over down in Arizona and New Mexico and Texas, I hope  
20 that's part of your basis for even considering these guys'  
21 permit. It's the only way, intelligent.

22           I seen the guy give out a thingy. I wanted to give  
23 you guys my little bit of my research on HR&I, UR&I. You can  
24 get all this stuff off the net, this is from the net. I don't  
25 have a fast database on Powertech, plus you want to read up.

1 MS. GIEDD: I'll mark it, Mr. McCahren.

2 MR. ONE FEATHER: It's Powertech and basically all  
3 from Powertech's Web site. I don't know if you guys are scared  
4 of the Internet like some people I know in their fifties and  
5 sixties, they are scared of that machine, but anyway, there's a  
6 lot of --

7 MS. GIEDD: Can you wait a second so she can mark  
8 this.

9 EXHIBITS:

10 (Exhibits C, D and E marked for identification.)

11 MS. GIEDD: The department has no objection to C, D  
12 and E.

13 CHAIRMAN McCAHREN: This is Exhibit C offered on  
14 behalf -- Exhibit C offered by Mr. One Feather, marked as  
15 Exhibit C. Do you have any objection?

16 MS. GIEDD: None.

17 CHAIRMAN McCAHREN: It will be received.

18 MS. GIEDD: It's C, D and E. We marked them  
19 separately.

20 CHAIRMAN McCAHREN: Do you have any objection to C, D  
21 and E? If not, they will be received and put in our records.

22 EXHIBITS:

23 (Exhibits C, D and E received into evidence.)

24 MR. ONE FEATHER: Like I was describing before, those  
25 are mostly from Powertech and then from a university down

1 south, the University of New Mexico I believe, or no, New  
2 Mexico Law Center, I believe, Environmental Law Center.  
3 Anyway, they do have a lot of things with HR&I. There's also  
4 their last published or Internet published financial  
5 statements. You guys should really look at that. It's pretty  
6 much speculation. I hate to be the nay sayer or anything, but  
7 I see it from a perspective that if I had a few thousand bucks,  
8 I'd invest in the thing, but I'm not into like that, I would  
9 rather be poor than damage the environment for the future, for  
10 our children that are going to go out and maybe some day they  
11 go out there and don't have to worry about any of those issues,  
12 the pollution and stuff, to dive in the creeks and catch a fish  
13 out of there and not have to worry about it being poisoned or  
14 anything like that. You get sick from eating some of the fish  
15 now, frogs, whatever. Anyway, that's pretty much it. That's  
16 what I'm hoping that you guys will at least think of tomorrow,  
17 not the dollars you get today or stuff.

18 CHAIRMAN McCAHREN: Thank you. Anybody else?

19 MR. FORT: I would like to just suggest, I'm not very  
20 optimistic about this, to tell you the truth, but I think on  
21 the basis of a lot of things we have heard today, a motion to  
22 continue this hearing should be reconsidered. I so move, if  
23 that's in order.

24 CHAIRMAN McCAHREN: No, it isn't. But I like the  
25 style. Did you ever hear Ramone Roubideaux's story about the

1 preliminary hearing where he moved to have the charges  
2 dismissed and his client seconded it and they had a vote?

3 MS. LAMBERT: Doing anything with uranium is never  
4 healthy or safe. Powertech is a new company. I heard that  
5 they are from Canada, I've heard they are from Colorado. I was  
6 going to say they are a guest in South Dakota, but evidently  
7 they have taken up residence. And with only a two-year track  
8 record, I am concerned about South Dakotans being guinea pigs  
9 for a new company with such a short track record.

10 The philosophy of valuing life, as you have heard, is  
11 extremely important and understandable by indigenous people and  
12 a lot of other minority people and a minority of whites, and I  
13 know that South Dakotans recently this past year especially  
14 have been talking a lot about valuing life when they talk about  
15 killing fetuses, and I feel that they should be just as  
16 concerned about killing or poisoning our soil and water and our  
17 living human beings.

18 CHAIRMAN McCAHREN: Anybody else? If not, we are  
19 going to proceed here. Mr. Putnam, excuse me, sir.

20 MR. PUTNAM: I'm John Putnam from Dewey. My history  
21 isn't near as extensive as a lot of people here. My family is  
22 relatively new comers, about 100 years we have lived there. As  
23 someone who drinks the water from the aquifer in question, I  
24 would encourage you to grant the permit in question. Thank  
25 you.

1           CHAIRMAN McCAHREN: Thank you. That's going to  
2 conclude the testimony as part of our hearing. I am going  
3 to -- ma'am.

4           MS. WHITE FACE: Thank you. It was a statement that I  
5 found that I was looking for before and this is in regard to  
6 land ownership. In a Powertech letter dated August 23rd, it  
7 says, please be assured that Powertech will not conduct  
8 exploration drilling on lands administered by the U.S. Forest  
9 Service or where there is a legitimate conflict regarding  
10 control or ownership. As you know, we historically still  
11 maintain that this area is treaty territory. Also under a  
12 Fifth Amendment taking, the 1980 Supreme Court decision stated  
13 that it was an illegal taking. If you need a copy of that as  
14 an exhibit, I would like to submit the 1980 Supreme Court  
15 decision that said that the taking of the Black Hills was an  
16 illegal taking. They tried to give us money and we have said  
17 no. This happened in 1980 and we still have never taken a  
18 penny of it. We cannot sell our mother, we cannot sell our  
19 children, we cannot sell anything that is sacred to us.

20           So I would like to submit this 1980 Supreme Court  
21 decision regarding the land ownership question and I would also  
22 like to submit this -- the March 3rd Act of 1871. The March  
23 3rd Act states in here, nothing herein contained shall be  
24 construed to invalidate or impair the obligation of any treaty  
25 heretofore lawfully made and ratified with any such Indian

1 nation or tribe. This was made March 3rd, 1871.

2 Our last treaty that we made with the United States  
3 was the Fort Laramie Treaty of 1868, which was three years  
4 prior to this federal law, and so that is why we still hold  
5 that we have legal land ownership, legal title of all the Fort  
6 Laramie Treaty 1868 territory, which includes this area that  
7 Powertech wishes to explore. And I would like to submit these  
8 as exhibits to the board.

9 CHAIRMAN McCAHREN: Go ahead.

10 EXHIBITS:

11 (Exhibits F and G marked for identification.)

12 CHAIRMAN McCAHREN: Okay, Ms. White Face offered  
13 Exhibits F and G and they will be received.

14 EXHIBITS:

15 (Exhibits F and G received into evidence.)

16 CHAIRMAN McCAHREN: This concludes the testimony part  
17 of the case. We are going to take some action on it here.  
18 Board action. At 45-6D-29 it states, the board may not deny a  
19 permit except for one or more of the following reasons, and  
20 there is five reasons listed that we are specifically directed  
21 to call attention to if we are going to deny a permit.  
22 Otherwise it has to be granted.

23 MS. HILDE: Do we have a copy of that?

24 CHAIRMAN McCAHREN: Yes, there was some statutes given  
25 you. I'm just calling attention to it because that's what we



1 are governed by.

2 MR. SWEETMAN: In response to Charmaine White Face,  
3 first of all, your testimony, your final testimony was very  
4 moving. I think I understand what you are saying. I thought  
5 it was excellently done. I think our problem is, as Mr.  
6 McCahren said, the granting of the permit has to -- the permit  
7 has to be granted I should say unless it falls within -- if it  
8 falls within certain parameters, and those are, as I read  
9 through here, they are relatively specific and we don't -- I  
10 guess they don't include the issues that you are talking about.  
11 I'm sorry about that, but that is what is here.

12 45-6D-29 says the board may not deny a permit unless,  
13 one, the application is incomplete, the applicant has not paid  
14 the fee, the adverse effects of the proposed uranium  
15 exploration operations -- this is the exploration -- on  
16 historic, archaeological, geologic, scientific or recreational  
17 aspects of the affected or surrounding land outweigh the  
18 benefits of the proposed exploration operation. And I believe  
19 our testimony has said there would be no, virtually no adverse  
20 effects on the land to be explored. Or the proposed uranium  
21 exploration will result in a loss or reduction of long range  
22 productivity of watershed lands, public or domestic water  
23 wells. There was no testimony that said that would happen.  
24 And number five, will adversely affect threatened or endangered  
25 wildlife indigenous to the area, and we had testimony that that

1 would not happen. So I don't know that there are any grounds  
2 for refusal of the exploration permit.

3 CHAIRMAN McCAHREN: Are you moving to grant?

4 MR. SWEETMAN: I'd like to hear what anyone else has.

5 MR. LANDGUTH: I have one question, if I may. A  
6 little bit further on what was said, can staff tell me -- I  
7 want to make sure all the I's are dotted and the T's are  
8 crossed here. Can staff tell me why, in this particular case,  
9 an EA or a NEPA was not required?

10 MS. GIEDD: A state environmental impact statement or  
11 environmental assessment is not required with regard to --  
12 there's a specific exemption for DENR permits of an  
13 environmentally, regulatory nature, and that's what all of  
14 DENR's permits are. This is a regulatory permit. Therefore,  
15 we are exempt from any state NEPA requirement.

16 With regard to the federal question, if federal lands  
17 such as BLM land or National Forest land were involved in the  
18 situation, they may have federal EIS requirements imposed on  
19 them. It is our understanding that no BLM land and no Forest  
20 Service land is required. Even if it is, the EIS and EA is  
21 their job to do and it relates to whether or not they will  
22 actually lease to this company, not whether or not our permit  
23 is issued. So it's a separate issue.

24 MR. LANDGUTH: Thank you very much. Mr. Chairman,  
25 that's all I have. That answers my question, thank you.

1           MR. DeMERSSEMAN: What Mr. Sweetman said, I feel he  
2 was very positive about the comments that he made concerning  
3 the statements of Ms. White Face. I have to disagree with some  
4 of what she said. You haven't taken the money, but as the case  
5 of 1980 says, the rights have been determined under the law,  
6 and I don't think it will ever be redressed. Ms. White Face  
7 indicates that she's part of an organization called Defenders  
8 of the Black Hills. That's where I was born, where I have  
9 lived all my life, except when I was away at school, and I  
10 think that I'm a defender of the Black Hills.

11           I think that I agreed to serve on this board, it sure  
12 isn't for the money, but because I think part of my function is  
13 to defend the area that I care very much about. And the purity  
14 of the water, things of this sort, I do not share the animist  
15 views that she has expressed, but I hope and from what  
16 experience I have had with this board, I think that many of us  
17 are here because we feel that we are stewards of the land and  
18 of the water. And for that reason, I concur in the statements  
19 made by Chairman Sweetman.

20           CHAIRMAN McCAHREN: Thank you. Board action.

21           MS. HILDE: May I comment first? This board makes a  
22 lot of very hard, very tough decisions and at one time I sat in  
23 your place intervening on an issue and over my years of working  
24 on this board, I have understood much better the necessity of  
25 us to follow the laws and the rules that have been put in

1 place. You can make an effort to change those laws and rules  
2 and it is possible, because I've done it, but you have to  
3 operate within the patterns of the society that has made these  
4 laws and rules, and therefore, sometimes we have to make  
5 decisions that are very hard and decisions that are not  
6 perfect. And I think this is one of these times. Therefore, I  
7 will move that we approve this permit.

8 CHAIRMAN McCAHREN: Moved by Hilde. Seconded by. . .

9 MR. MONSON: I'll second it.

10 CHAIRMAN McCAHREN: Monson. Further discussion.

11 MR. DUXBURY: I certainly appreciate everybody's  
12 thoughts, and certainly in respect to sacred areas and things  
13 like that, the only area that I think maybe I have a little  
14 difference, since I'm probably the oldest one here in this  
15 group in that deal, growing up and that, I think a lot of areas  
16 we have less pollution because of the things we have done in  
17 conservation and with rules and supervision of mining  
18 operations as well as farming operations and things like that.

19 And I think probably referring to water areas, we can  
20 look to many that have improved from what they were years ago,  
21 it's probably more than those that are in poor condition. But  
22 I certainly respect and honor every statement and concern that  
23 everyone has with this and has made today. I know they are  
24 sincere and there's a lot of things that we don't have all the  
25 answers for as well. But we want to manage our resources to

1 the best of our ability.

2           CHAIRMAN McCAHREN: I attended the same three-day  
3 conference that Marc Macy did in Denver and I was astounded,  
4 all of the opponents of nuclear energy have turned around. Max  
5 was there, sat side by side. They are adamantly opposed to  
6 coal-fired. They are adamantly opposed to the carbon debt we  
7 have built up. They are 100 percent in favor of the nuclear  
8 energy, even though we haven't built a plant in decades, and  
9 it's going to take a long time to build one. And this is the  
10 first step because they gotta get the source for the fuel, and  
11 it was interesting to see that complete change in the attitude  
12 of the people that have been involved in some of this stuff for  
13 all these years from what it had been.

14           You know, they had a small operation in Sioux Falls  
15 and they tore it down. There is an in-situ mine right across  
16 the border over here at Chadron, Nebraska. I wanted to go  
17 visit it and our staff showed us there was just a pipe coming  
18 out of the ground so there wasn't much to look at. You weren't  
19 going to go down a shaft or anything. So it's present, and as  
20 one of the men at the conference said, people talk about wind  
21 power, solar and all this, he said, I ask those people, I say,  
22 do you like to watch TV at night? That's the message, you  
23 know. We need the power, this is the one way of going about  
24 it, and like I was taught long ago, everybody ought to have a  
25 power plant in their back yard so they know where it comes

1 from. It doesn't just happen. But that's my thoughts and that  
2 was what I learned at that conference, too. Anybody else? All  
3 those in favor of the motion say "aye."

4 (All board members voted "aye.")

5 CHAIRMAN McCAHREN: All those opposed? Motion passed.  
6 That concludes this matter. Do you have paperwork?

7 MR. MAIN: Yes, I do, Mr. Chairman. I have drafted up  
8 findings, conclusions and an order that reflect the evidence, I  
9 believe.

10 CHAIRMAN McCAHREN: Have you looked at them?

11 MS. GIEDD: I have.

12 CHAIRMAN McCAHREN: Do you want to do it now or  
13 tomorrow or what do you want to do?

14 MS. GIEDD: I think now is fine. I have looked at  
15 them and I don't have any changes. The change I had to them,  
16 it's already been incorporated, so we are good.

17 MR. MAIN: I have them.

18 CHAIRMAN McCAHREN: Let me think for a moment.

19 MR. MAIN: I've got copies if you want to give copies  
20 to the board to look at.

21 CHAIRMAN McCAHREN: Are you going to be here tomorrow?

22 MR. MAIN: Yes. I have -- I've got copies to give to  
23 them.

24 CHAIRMAN McCAHREN: Do that. I'd feel better. You  
25 keep the original so I don't lose it. We are going to review

1 these tonight. You people ought to have a chance to look at  
2 the paperwork. We will address it tomorrow morning.

3 (Discussion held off the record.)

4 CHAIRMAN McCAHREN: We are going to consider the  
5 findings of fact, conclusions of law and order this evening, as  
6 are the parties. Tomorrow morning we are going to review them  
7 and sign them. There won't be a court reporter here, but there  
8 won't be any action taken that hasn't already taken place.  
9 Thank you.

10 (Whereupon, the proceedings were concluded at 5:34  
11 p.m.)

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