

1 and subsequently reconvened at 7:00 p.m., and the following  
2 proceedings were had and entered of record:)

3 MR. SMITH: Good evening, everyone. It is about 7  
4 p.m. on Thursday, June 29th, 2006. This is the time and the  
5 place that we noticed in our fourth scheduling and procedural  
6 order to receive additional public input comment and if people  
7 out there so choose, offer testimony in the case. The case I'm  
8 talking about is the applicants of Otter Tail and its  
9 associated companies for a permit to construct the Big Stone II  
10 coal-fired electric generating station just outside Big Stone  
11 City, South Dakota in the northeast part of South Dakota.

12 Many of us in the room have spent the last four days  
13 in the formal contested case portion of this proceeding where  
14 we have taken a huge amount of factual evidence into evidence  
15 and the commissioners will need to make a decision on the basis  
16 of that evidence. I want to emphasize that there are, in  
17 addition to the straight factual findings in a case like this,  
18 there are also in effect policy decisions within the parameters  
19 of the law that the commissioners need to make in every case  
20 and they are going to have to do that here.

21 And one purpose of taking public input testimony is so  
22 that the public can give us your views as to when there's a  
23 gray area or close call or an ambiguity or whatever in the law,  
24 this leeway, you can let us know how you think the  
25 commissioners ought to look at this case, and that's one of the

1 purposes I think we want to try to fulfill tonight or give you  
2 the opportunity to have that input into how the commissioners  
3 should view this case.

4           We noticed the proceeding under a particular rule of  
5 ours which allows persons to appear in a case and be heard, and  
6 basically what I think we have decided, and we provided that  
7 you may be subject to cross-examination. I don't know that  
8 everyone out there in the audience wants necessarily to be a  
9 fact witness in the contested case proceeding or whether your  
10 input tonight is more in the nature of policy or philosophical  
11 type positions that you just feel you want the commissioners to  
12 hear.

13           And the way I think I'm going to break it down is  
14 this. If what you want to do is just make comments that are in  
15 the nature of philosophy, policy, just giving your views to the  
16 commission, we are not going to swear you and you are not going  
17 to be subject to cross-examination. The down side of that is  
18 we will also then not be considering your testimony here  
19 tonight as part of the hard factual record in the case. It  
20 will be treated as comment. If you want what you say tonight  
21 to be treated as fact evidence in the case, then please let me  
22 know that and then we are going to swear you as a witness and  
23 there's various attorneys in the room that have been here for  
24 several days and they will have the opportunity then to  
25 cross-examine you about particular factual statements that you

1 may make. And I don't know, I guess before we begin, do the  
2 commissioners have any objections to that mode of operation?

3 COMMISSIONER HANSON: No, I don't.

4 VICE-CHAIR JOHNSON: Mr. Smith, I don't have an  
5 objection, I just might note that this has not been the only  
6 opportunity for public input. There was a public input session  
7 this commission had at Milbank some number of months ago.  
8 There's also been a written comment period and so we have  
9 wanted to solicit as much public input as possible, and  
10 certainly whatever you say tonight, even if you choose only to  
11 make commentary and not be a sworn witness, that information  
12 certainly enters our brains and is important to us as well.

13 MR. SMITH: Commissioners, before we start, would you  
14 like to introduce yourselves for the audience.

15 CHAIRMAN SAHR: My name is Bob Sahr, I'm the chairman  
16 of the South Dakota Public Utilities Commission and I just want  
17 to say thank you for everyone that came here tonight and we  
18 appreciate your input into the process.

19 VICE-CHAIR JOHNSON: Dusty Johnson.

20 COMMISSIONER HANSON: I'm Gary Hanson.

21 MR. SMITH: And I'm John Smith, and I'm the real John  
22 Smith.

23 VICE-CHAIR JOHNSON: It's funny every time.

24 MR. SMITH: You're like a walking joke. At any rate,  
25 I'm the general counsel of the commission and in contested case

1 hearings, I generally serve as the hearing examiner, which I'm  
2 going to do tonight. And with that, we will open the -- I'll  
3 note for the record that we have received several written  
4 comments thus far. Those comments are accessible on our Web  
5 site and I'll have to try to remember the URL. You probably  
6 all know it already, but it's [www.puc.sd.gov](http://www.puc.sd.gov) and those written  
7 comments are under this particular docket page on our Web site,  
8 which you find at commission actions, commission dockets, 2000  
9 electric dockets, and then scroll down to EL05-022 and most of  
10 the comments we have received, in fact all of them have been  
11 within the last couple weeks written comments that were not  
12 included at least in the earlier Milbank public meeting  
13 proceeding, and so you may see on the Web site what everybody  
14 out there has submitted in writing, and I encourage you to do  
15 that.

16 At this point I guess I would like to open up the  
17 hearing tonight and I'm not quite sure how to go about this. I  
18 guess what I'll do is just open it up and allow persons who  
19 wish to speak to raise your hand or to come up to the witness  
20 stand here and take it from there.

21 VICE-CHAIR JOHNSON: Might it make sense to have all  
22 those people wishing to offer public comment to go first or do  
23 you not mind having a checkerboard?

24 MR. SMITH: Why don't we do that. Why don't we allow  
25 anybody who wishes just to give comment to go first and then

1 that way if there are people who want to be here and subject  
2 themselves to cross-examination and go on and on with this,  
3 well then the other people can decide whether they want to hear  
4 about that.

5 CHAIRMAN SAHR: Don't make it sound too enticing.

6 MR. SMITH: No, no. Does anyone in the audience want  
7 to give public comments?

8 MAYOR EISNACH: I'll volunteer to go first.

9 CHAIRMAN SAHR: I wanted to cross-examine you.

10 MAYOR EISNACH: You are not going to get that chance.

11 CHAIRMAN SAHR: Mayor, if you would, please, just a  
12 friendly reminder, this goes for everyone in the audience, we  
13 have a number of people that have been listening in on the  
14 Internet and one of the challenges with the witness microphone,  
15 you have to be very close to it, so you and the other people  
16 who intend to speak tonight could pull it close, we sure would  
17 appreciate it and we know our friends on the Internet would,  
18 because they have had trouble hearing witnesses otherwise. So  
19 thank you very much, Mayor.

20 MR. SMITH: Mayor Eismach, one more announcement  
21 before you start and I apologize, I really do. I wanted to  
22 remind everybody that in the fourth scheduling order, we did  
23 the deadline for written comments at 5 o'clock tomorrow, June  
24 30th, so I would just like to remind everybody in the audience  
25 and particularly the people on line that couldn't be here, that

1 if you want your comments included in the record in this case,  
2 we need to have them, we just have to have a cutoff sometime  
3 because we have a very short time frame before we are required  
4 by statute to render a decision in the case. And so we need to  
5 know at some point what's in the file and what we are dealing  
6 with. Pardon me, Mayor Eismach. Please proceed.

7           MAYOR EISMACH: Thank you. Mr. Chairman and members  
8 of the commission, it is a pleasure for me to be here tonight  
9 on the other side of the table. It's been a while since I've  
10 been with the group of PUC people and this is an unusual place  
11 for me to be, but it's a pleasure to be here. And I'm here  
12 tonight with some very brief comments, understanding that you  
13 have put in a long week with your evidentiary hearing. But I  
14 wanted to make some comments tonight about the relationship  
15 between the City of Pierre and the Missouri River Energy  
16 Services, which as you know, is one of the partners of the  
17 proposed Big Stone plant.

18           Pierre is one of 12 cities in South Dakota that is a  
19 member of the MRES and as that, the Missouri River Energy  
20 Services actually provides the supplemental power for Pierre  
21 and those other 12 cities over and above what our hydro  
22 allocation is. And because of the fact that Pierre and along  
23 with a lot of the other communities in South Dakota that are  
24 members do have some growth, you know, our community here in  
25 Pierre has had about a three percent steady growth over the

1 past decade, and because of that, our electrical demand  
2 continues to grow and as you know, our hydropower is limited.  
3 And the additional energy that we get is coming from Missouri  
4 River Energy Services, and right now one of the bigger base  
5 load plants that Missouri River Energy Services is involved in  
6 is the Laramie River Station at Wheatland, Wyoming. And  
7 because of the growth that we have had on our system, Missouri  
8 River Energy Services, it is time now that we look to the  
9 future so that we can continue to supply the low cost, stable  
10 power, stable rates for those members that belong to MRES.

11           Really that's why I'm here, and we are very, very  
12 pleased, I guess, that Missouri River Energy Services has  
13 chosen to become a partner in the Big Stone plant, for a couple  
14 of reasons. First of all, it's in South Dakota and we like  
15 that. That's good economic development for our state. Second  
16 of all, I am very pleased about the philosophy that Missouri  
17 River has had as far as the environmental philosophy they had  
18 when they are looking for additional power. And the Big Stone  
19 power plant, from what I have read, is going to be a very  
20 environmentally sound plant that will be as environmentally  
21 responsible with the additional new plant as it is right now,  
22 which means that there's going to be some major things that are  
23 done as far as environmental controls. So I'm pleased about  
24 that and I think all of us that live in South Dakota should be  
25 pleased about that.

1           One of the other things that I think you should know,  
2 that as a member of Missouri River Energy Services, we belong  
3 to an organization that really has a better record I would  
4 think than most organizations do as far as having  
5 environmentally clean power, and that is because of the fact  
6 that about 50 percent of the power that is supplied to those  
7 members comes from the hydropower, and the base load plants  
8 that we have got, the one over in Wyoming, is a very  
9 environmentally sound plant and we know that the Big Stone I is  
10 going to be also.

11           In addition to that, Missouri River has taken on some  
12 wind energy projects, the biggest one, which is over in  
13 Worthington, Minnesota, and they also supply additional power  
14 into our system. One of the other things that I have read  
15 about that I'm particularly interested in, having sat on the  
16 other side of the table here, is part of the project with Big  
17 Stone is to do some upgrades to the regional transmission  
18 system, and all of us that have been involved in electric  
19 transmission know that probably the biggest barrier to doing  
20 something here in South Dakota, whether it's a base load plant,  
21 whether it's wind energy, whatever it might be as alternative  
22 sources of energy, is being able to get that to the market and  
23 on the grid. And without transmission, we have a barrier. So  
24 as part of this, there are some upgrades that are going to be  
25 done and I think that's fantastic.



1           So in closing, I just want to urge you to support the  
2 siting of the Big Stone plant. I think it's not only good for  
3 communities like Pierre, but it's outstanding for the state of  
4 South Dakota as far as economic development is concerned.

5 Thank you for your time.

6           CHAIRMAN SAHR: Thank you, and I should note,  
7 certainly it was implied in some of our comments and in your  
8 comments, Mayor, but not only are you the mayor of Pierre, but  
9 you are also a former commissioner on this commission and we  
10 really appreciate you coming here tonight and welcome you back  
11 to a setting, even if you are on the other side of the table,  
12 you probably know quite well, so thank you.

13           MAYOR EISNACH: Thank you, Bob.

14           VICE-CHAIR JOHNSON: And if, as you step forward, if  
15 you would say your name and if you have any particular  
16 affiliation or town that you come from, that would be great.

17           MR. GEOFF HEIG: My name is Geoff Heig and I'm the  
18 general manager at Watertown Municipal Utilities and it seemed  
19 like a good time to tag along with the other MRES member  
20 Pierre. Like Pierre, we are --

21           CHAIRMAN SAHR: If I may, do you need the spelling of  
22 his last name?

23           MR. GEOFF HEIG: Like Pierre, we are one of the 12  
24 members in South Dakota that are members of Missouri River, and  
25 as such, we receive our supplemental power from Missouri River

1 to meet our growth. Watertown is the largest municipal  
2 electric system in South Dakota. We serve 12,000 electric  
3 customers and we are also the fastest growing community in the  
4 60 members of the Missouri River family in the four states that  
5 they operate in.

6 We are continuing to grow and develop. In the past  
7 few years, we have seen an increase in population, business  
8 development, the completion of an ethanol plant within the city  
9 limits of Watertown, a plastics manufacturing plant, a new  
10 events center, and anyone of course who goes along Interstate  
11 29 is starting to see an awful lot of commercial growth near  
12 Watertown in that area.

13 Our electric load growth has averaged more than five  
14 percent per year over the last 20 years. Our total demand has  
15 more than doubled in that time. And our total energy sales has  
16 actually gone higher than that. Our load factor has actually  
17 gained in that time, so our electric load growth, we are  
18 planning on load growth in 2007 of 10 percent in one year  
19 alone. We will use up seven megawatts of Missouri River 's 150  
20 megawatt allocation from the Big Stone II plant just next year  
21 alone in Watertown.

22 We are going to continue to seek economic development,  
23 we have been pretty lucky at that, bringing new jobs, industry  
24 and citizens to the community, but in order to do that, as you  
25 can see, we need a reliable and energy efficient source of

1 power. In order to meet these demands and the demands of its  
2 other members, of course, Missouri River has joined the  
3 participants in the Big Stone II plant. As a citizen of the  
4 community of Watertown, I am pleased that Missouri River has  
5 had the foresight to plan for our community's future needs by  
6 participating in the building of a cost efficient plant like  
7 Big Stone.

8 I've had the additional opportunity, since I sit on  
9 the Missouri River's board of directors, to help in the  
10 planning process and make some of the decisions that led up to  
11 this point. And as such, I encourage the PUC to approve the  
12 application here and we need the power in Watertown and I thank  
13 you for allowing comments.

14 VICE-CHAIR JOHNSON: Who's next?

15 MR. KORY RAWSTERN: Hi there, my name is Kory  
16 Rawstern. I sit on the South Dakota Building Trades Committee  
17 and I'm an electrician by trade. The Building Trades  
18 Committee, which represents nearly 20 different crafts, have  
19 been working with Black and Veatch and the owners group of Big  
20 Stone II for the past several months. I believe we are all  
21 well aware of the power needs facing our country as of today.  
22 We, the South Dakota building trades, feel Big Stone II will  
23 address the power needs for our region.

24 There is a signed contract agreement between the South  
25 Dakota Building Trades and Black and Veatch for the Big Stone

1 II project. We are very excited to have the opportunity to  
2 show the professionalism of our South Dakota work force. The  
3 projected manpower for this project should exceed 1200  
4 craftsmen and with our established apprenticeship programs, the  
5 building trade endorsed Helmets-to-Hard-Hats for our military  
6 personnel. In addition, we are creating links with the  
7 Governor -- with Governor Rounds work force development  
8 programs, the vocational schools, and tribal employment rights  
9 offices. We believe the Big Stone II project will benefit not  
10 only the consumers but with the talk of other possible power  
11 plants in the state of South Dakota and surrounding states, we  
12 would be -- we believe it would be a tremendous opportunity for  
13 more South Dakotans to become trained, skilled craftsmen.  
14 Thank you for this opportunity.

15 MS. MIRIAH HICKS: Good evening, Commissioners and Mr.  
16 Smith. My name is Miriah Hicks. I am currently the executive  
17 director for the Milbank Area Chamber of Commerce. Tonight I  
18 would like to offer my testimony in favor of the Big Stone II  
19 project. In my capacity as a chamber director, I speak to the  
20 missions of the chamber, one of which is to encourage and  
21 support community growth and to stand behind projects that add  
22 value to our community. The creation of the Big Stone II plant  
23 will undoubtedly add economic growth and value for the existing  
24 businesses and add opportunity for the creation of new ones in  
25 Milbank and the region.

1 Over the course of the week you have heard detailed  
2 testimony regarding the intricate details of this project.  
3 Tonight I speak to the general benefits the community of  
4 Milbank expects to experience.

5 Future identity. Communities all around the state  
6 currently struggle to survive and maintain their identity. The  
7 construction and operation of Big Stone II will enable added  
8 stability to our community and insure that Milbank will not  
9 become a mere memory of a once strong community. The Big Stone  
10 II project will create jobs of which will add vitality to our  
11 community and entice new families to the area and increase  
12 retail sales overall to the local economy.

13 Communities are often identified by key industries,  
14 employers and events in the community's history. The  
15 construction and operation of the first plant, Big Stone I, was  
16 an event that helped establish the current business climate in  
17 Milbank. The employment at Big Stone I continues to provide to  
18 the area, identifies it as a major employer with roots to the  
19 community. The construction of Big Stone II will again become  
20 an identifying time in our community's history. It is my  
21 belief that many of the other businesses established in Milbank  
22 might not exist if Big Stone power plant and other businesses  
23 like it were not in the area. Communities depend on major  
24 employers and it is for that reason that we welcome the  
25 expansion of our good neighbor.

1           Community preparedness. The community is ready to  
2 embrace and is continuing to prepare for the growth projected  
3 with the Big Stone II plant. Examples include the opening of a  
4 satellite clinic in Big Stone City, the establishment of a TIFT  
5 housing district with more in the planning phases and planned  
6 law enforcement training and assistance measures. Housing was  
7 addressed yesterday. I was listening via -- listening live via  
8 Internet during Mr. Madden's testimony, most of which focused  
9 on housing. Milbank has and continues to prepare for  
10 additional housing, both temporary and permanent, for the Big  
11 Stone II project.

12           As mentioned, we have begun the development of a TIFT  
13 housing district in Milbank and we will not stop there.  
14 Although the construction phase would be three to five years,  
15 Milbank welcomes the tax dollars and increased retail sales  
16 that would come from the temporary workers living in our  
17 community during such time. In order for Milbank, Big Stone  
18 City and other immediate communities to gain the full benefit  
19 from the project, we want to do what we can to accommodate and  
20 welcome workers living, sleeping, eating and recreating in our  
21 communities. We want to take full advantage of the energy that  
22 will take place during the Big Stone II project and are aware  
23 of the undoubtable slowdowns the local economy will face  
24 following the completion of the Big Stone II plant.  
25 Regardless, we want to take full advantage of the growth during

1 the construction phase, the construction and completion phases  
2 of the Big Stone II plant.

3 Milbank will continue to be creative in providing  
4 affordable, comfortable housing for temporary and permanent  
5 employees of the Big Stone -- of the power plant. I believe  
6 that Milbank is a progressive community and will take action to  
7 protect our residents from unreasonable rent increases, but we  
8 will also act in a way that will allow and welcome as many  
9 temporary workers as possible.

10 Job development. The Stuefen Research -- Business  
11 Research Bureau provided an economic impact highlight of Big  
12 Stone II power plant construction report. In this study it was  
13 concluded that 35 full-time equivalent and 29 part-time  
14 positions in the community, as well as a projected 2,550  
15 full-time equivalent positions during the construction, would  
16 result if Big Stone II were built. Milbank fully welcomes  
17 these jobs and the ripple effect it will bring to our  
18 community. I don't think you will find a community in the  
19 state against such growth if it were in their community.

20 Alternative energy sources. In previous testimony and  
21 arguments, alternative energy sources have been mentioned. I  
22 think it important to look outside the industry directly and  
23 see that the existing Big Stone plant has enabled the growth of  
24 ethanol, an alternative fuel source, namely Northern Lights  
25 Ethanol. This is, as you are aware, a growing industry with

1 huge potential in South Dakota and the Midwest. The success of  
2 Northern Lights Ethanol is partially attributed to the existing  
3 Big Stone plant and as an example of how two industries can  
4 work together to benefit each other.

5 Big Stone Lake atmosphere. Comments have been made  
6 regarding the environment condition of Big Stone Lake and such  
7 quality following the completion of the Big Stone II project.  
8 I would like to mention that lake development is at an all time  
9 high. Every day it seems that someone new is purchasing lake  
10 front property, developing the land and building recreation and  
11 retirement homes. The existing plant, Big Stone I, and the  
12 anticipation of Big Stone II doesn't appear to act as a  
13 deterrent for lake development. It is my opinion that lake  
14 property will continue to climb as lake front property is  
15 highly coveted.

16 I would not be here tonight if I did not believe that  
17 this project would be a benefit to the local and regional  
18 economy, add to the quality of life for the residents in  
19 Milbank and the surrounding area and overall provide a benefit  
20 to the state.

21 When considering the arguments and testimony made  
22 throughout the week, I ask that you consider the effort put  
23 forth by each of the partner companies making up Big Stone II.  
24 These partners have worked hard to meet and exceed  
25 environmental standards not only for Big Stone II but to



1 upgrade the existing plant. This has showed our commitment to  
2 the area and provide that Big Stone I -- and proved that Big  
3 Stone I has been a good neighbor for the community, holds  
4 strong environmental conscience and is making every effort to  
5 stay at the forefront of the industry and to act as a model for  
6 future projects. The partners of Big Stone II have thought  
7 this process through in a way that protects the community and  
8 maintains the good neighbor feeling that Big Stone I has  
9 provided our region.

10 I hope that those intervening on this project take  
11 into consideration the weight and impacts of community growth  
12 and sustainability factors the construction and operation of  
13 Big Stone II will provide to our area. I believe it was Mr.  
14 Welk in his opening statement that identified many of these  
15 steps taken by Big Stone II in terms of protecting and  
16 maintaining the community's resources, i.e., sound law  
17 enforcement, safety, roads, training, public relations, et  
18 cetera. By granting this permit, you can be assured that the  
19 project will proceed in the same thoughtfulness shown so far.  
20 Thank you for your time and consideration this evening.

21 MR. GEORGE SMITH: Good afternoon. First I'd like to  
22 thank you for the opportunity to present here. I did attend  
23 the hearing in Milbank and I subsequently sent a letter because  
24 I wasn't able to stay for the entire meeting, but I decided to  
25 come and testify simply because I think I'm going to try and

1 cover some areas that the other speakers may not.

2 My name is George Smith. I am the economic  
3 development director from Grant County, a position I have held  
4 for 10 years since I retired in 1964 -- 1994, excuse me. Too  
5 many numbers to work with.

6 Prior to that time, starting in 1967, I was the  
7 superintendent of schools in Milbank and I was very deeply  
8 involved in the activities that took place both locally in our  
9 county and at the legislative session during the spring in each  
10 of those five years of construction with Big Stone II. There  
11 were many issues that came up there that affected us, including  
12 railroads, education, taxes, all kinds of things, and as those  
13 issues came before the legislature, I spent a lot of time in  
14 Pierre testifying and working as a lobbyist to address some of  
15 those issues.

16 Therefore, I feel that I have sort of a unique  
17 perspective, as we had a test run I call it with Big Stone I,  
18 and I have an idea of what we have to look forward to with Big  
19 Stone II, if it is permitted. With that background, I guess I  
20 could address a number of separate issues, including economic  
21 development and education and impact on communities, but what I  
22 have attempted to do is to capsulize what I wanted to say with  
23 a short series of 10 position statements or policy statements  
24 or personal statements that I think might be worthy of this  
25 hearing.

1           First let me say that I am a strong supporter of Big  
2 Stone II and that comes from experiencing both the issues  
3 created by the original construction of Big Stone I and also  
4 from the lasting benefits that those of us who live in that  
5 immediate area in the northeast have enjoyed as a result of  
6 having that plant there.

7           With that being said, as I said, I have tried to  
8 summarize in quick fashion the things I want to say and I have  
9 entitled this what we can expect if Big Stone II is permitted,  
10 built and then is operated by Otter Tail Power Company. You  
11 know, they are the operating firm of our current plant and have  
12 been since its inception with the Montana Dakota Utilities,  
13 Northwestern Public Service and Otter Tail being co-owners of  
14 that particular plant.

15           I'll just run through these quickly in a matter of  
16 time. We can expect that the facility will insure a continued  
17 supply of electric power that will meet the future needs of  
18 hundreds of thousands of customers as well as provide potential  
19 for a series of what I call huge energy farms along the Coteau  
20 Hills. Milbank is just on the east side of those hills and I  
21 think there are easements being taken right now in that area  
22 for energy farms that will be probably sprouting up there  
23 before too long.

24           We will have a facility that will provide additional  
25 employment in the community, bringing skilled workers into the

1 area, families to repopulate Grant County and the communities  
2 that are there, children for our schools, and other benefits  
3 that come from having a greater population in the area.

4 Presently I believe Big Stone is projecting an additional 40  
5 employees with the plant. Just by way of information, you may  
6 have seen some of this in the paper, Milbank has been blessed  
7 in the last two years with new businesses. Currently we have  
8 eight businesses that either committed themselves or are in the  
9 process of moving to the community and we are looking at we  
10 feel somewhere between 100 and 150 jobs over the next three or  
11 four years as a result of Big Stone, the expansion of Valley  
12 Queen Cheese, some of those other businesses. We even have a  
13 plant there, a business that came in there from California  
14 that's operating out of our community at the present time.

15           If the plant is permitted, we can expect it will be  
16 operated by a company that has a staff with a 31-year  
17 demonstrated positive performance record from the operation of  
18 the original plant, a company that has a history of placing  
19 customer support and satisfaction at the top of their priority  
20 list, a company that will maintain their continuing quest to  
21 equip both the current plant and Big Stone II with the latest  
22 generating technology, thus creating greater efficiencies. I  
23 believe I'm right in this, that Big Stone II (sic) was built as  
24 a 400 megawatt plant and now they are able to produce 450  
25 megawatts just through upgrades and technological advances in

1 the last 30 years or so since they have been there.

2 It will be operated by a company that will continue to  
3 demonstrate a concern for the environment by the addition of  
4 the most technologically advanced air, water and land  
5 protective devices as they become available, operated by a  
6 company that has planned for the future since Big Stone I was  
7 placed on line in 1975 for the day and time when the need for  
8 additional generation capability would be created by changing  
9 social and demographic conditions.

10 We talked about a second plant back in 19 -- well, as  
11 early as probably 1973, 1974. That was on the drawing board at  
12 that time and of course it took many, many years for it to come  
13 to this point, but nonetheless it was planned at that point or  
14 we knew there would be a greater need. It will be operated by  
15 a company that has demonstrated their intent to encourage  
16 additional new industry in the area, as has been evidenced by  
17 their cooperative development of the Northern Lights Ethanol  
18 plant, which is adjacent to Big Stone I.

19 It's a company that has been very active in each of  
20 the communities that they serve by providing both funding and  
21 human support for special projects of educational activities  
22 and community functions. And last but not least, the  
23 additional finance of resources that will come for the state of  
24 South Dakota and its eligible political subdivisions.

25 In summary, I would urge your full support of Big

1 Stone II. It has been identified as a necessity to insure the  
2 future growth and development of the region in which we live.  
3 Beyond that, due to the effort undertaken to create the  
4 consortium of partners supporting the project and the projected  
5 cost, it is an opportunity that may be gone forever if we do  
6 not recognize it is what could be a one-time possibility. With  
7 that, I appreciate the opportunity to speak here and thank you  
8 very much.

9 MR. SMITH: Thank you very much, Mr. Smith.

10 MR. DAVID BERGAN: Good evening. My name is David  
11 Bergan and I'm a retired high school principal and you might  
12 wonder why a high school principal would be here to testify. I  
13 just want to reflect for a minute. One of my first years as a  
14 principal I was a pretty young fella and all of a sudden  
15 somebody mentioned the fact there might be a power plant built  
16 in our school district, it might make a significant difference  
17 in the community, and of course I'm like everyone else, they  
18 have to kind of show me first. And I just want to relate to  
19 you what Big Stone I meant to our community and I will relate  
20 later what I think Big Stone will bring to our community.

21 Any time you have construction going on, you have  
22 people moving in, and we were always a good school, but we were  
23 kind of closeted in the country school mentality. We were kind  
24 of all in the same community and we had been there for a long  
25 time, no new ideas were generated and we just kind of status

1 quo. Many times in looking back, I kind of wonder why we  
2 didn't move faster in some of the things we should have been  
3 doing, but the construction of the Big Stone power plant  
4 allowed us to bring new people into the community, give us new  
5 ideas and get us off dead center, and we did. Not only did it  
6 allow us to put up a new building, which was very significant,  
7 but it allowed us to enhance our curriculum to the point where  
8 most of us, when we graduated from high school, if we had 16  
9 credits, that was it, that was the benchmark.

10 From the time -- from 1975 when the power plant came  
11 on line until 20 years later, we were already at 20 credits,  
12 that was one of the things that caused it to happen, because we  
13 had an enhanced curriculum. Before we had a hammer and a board  
14 and we called it industrial arts. And all of a sudden we have  
15 wood shop one, wood shop two, auto mechanics and all the things  
16 that went along, plus the college level math, the college level  
17 English, all the things that we probably should have had  
18 earlier but we didn't because we didn't have the staff, we  
19 didn't have the facilities and that's what this plant allowed  
20 us to do.

21 And the people that moved into the community were very  
22 instrumental in making us aware that, hey, you have got a good  
23 school but you have got a ways to go, and needless to say, we  
24 moved down the right road. Fine arts and the various areas  
25 were enhanced considerably just through the facility and being

1 able to hire people that had expertise in that area and moved  
2 us down the road in the right direction.

3           Now, my comments are going to be short and brief and  
4 you will say, well, okay, that's well and good for Big Stone I  
5 causing that to happen in the Milbank School District. What's  
6 going to happen with Big Stone II? Well, if you are looking  
7 around the state, there are a lot of communities that would  
8 just love to be able to maintain their student population.  
9 That's one of the things that could be beneficial because it's  
10 difficult with the small families that we have now days. Even  
11 if you move ten new families into the community, it doesn't add  
12 a lot of kids to the enrollment. That's one of the things that  
13 I'm certain at least will give us a little more stability in  
14 our school system, because when we started in '75, we had 530  
15 kids in high school. Right now this last -- in kindergarten,  
16 enrollment was below 60, so that kind of tells you where our  
17 school is headed without growth. So that's one of the things  
18 that hopefully Big Stone power plant will allow us to do.  
19 There's a number of other things that can also be benefitted in  
20 terms of new ideas and approaches that people bring into the  
21 community.

22           But one of the last comments I want to make is when we  
23 had open house at our new school back in '77, '78, when we  
24 walked in there, we had a room that we thought we were miles  
25 ahead of the rest of world. We really didn't know what we were



1 doing, but we had a room that was built that was probably eight  
2 by ten and on top of the door it said computer, and I can  
3 remember the people coming through the open house saying, what  
4 do you got that for, what's that computer thing? Well, that's  
5 one of the things that's coming. Well, needless to say, that's  
6 a closet now, it really is. It's the closet.

7           And so my point is, you know, we couldn't see the  
8 future in 1977, '78 and look where we are at today. What does  
9 Big Stone Power Plant II mean to our community in terms of  
10 education and growth? I have no idea. I think it's exciting  
11 to think that we have got the potential at least to grow and  
12 look at the future in a bright way rather than just kind of a  
13 gloomsday like a lot of communities have to look at it. So we  
14 are a community that's very happy with Otter Tail and they have  
15 been very, very good neighbors and very good contributors to  
16 the community, and with that, I'll end my comments. Thank you.

17           VICE-CHAIR JOHNSON: Anyone else interested in  
18 providing some public comment? Now we have got competition,  
19 who can get here first. Come on up, ma'am, that's fine.

20           MS. JEANNE KOSTER: I thought maybe I should come at  
21 the end of the comment period, in case someone wanted to ask me  
22 questions. I have no objection to that and I would even  
23 welcome it, but I'm not credentialed in the things that I'm  
24 talking about so I may not be worth questioning. However --

25           VICE-CHAIR JOHNSON: Plenty of the people who believe

1 they have been credentialed this week were not worthy of asking  
2 questions of, so if you have something you want to offer, we  
3 would take your comments either as sworn testimony or as public  
4 comment. What would you prefer?

5 MS. JEANNE KOSTER: I only have footnotes of things  
6 that I have read and discussed with other people who are the  
7 credentialed people. You can swear me in if you want, I've got  
8 the footnotes to -- I doubt it would be worth your while, but  
9 if you have questions, I do welcome them.

10 VICE-CHAIR JOHNSON: Let's do it this way. Let's go  
11 ahead and have you provide some comments and if we have  
12 follow-up questions, you may offer them, it may not be grilled  
13 cross-examination, but we won't be bashful about asking you a  
14 follow-up if we have one.

15 MS. JEANNE KOSTER: Fine. My name is Jeanne Koster  
16 and I'm here for myself. This is a good process and it's  
17 complementary to the federal process that is going on, the  
18 Environmental Impact Statement process, the NEPA process, the  
19 two do complement each other and it's worth noting that the  
20 NEPA process is being extended. You may be aware of that, that  
21 the deadline has gone forward. And that is really good because  
22 there are some very serious, serious shortcomings in the draft,  
23 not that there are not also glories in that draft. The people  
24 who did the draft did an excellent, excellent job of laying out  
25 all of the implications of the transmission capability that is

1 going to be installed, improved, the substations that may be  
2 improved or even reconstructed, very good job there. But there  
3 are other aspects which are far from adequate and it is one of  
4 those that I want to address tonight.

5           A man in a suit knocks at your door and makes a  
6 proposal. He suggests that a small commitment on your part can  
7 materially advance the greater good. A flurry of temporary  
8 employment would inject much appreciated cash around the  
9 Milbank area. After that there would be about 36 permanent new  
10 jobs. God bless those 36 lucky families and lucky Milbank to  
11 get them. Plus new transmission capacity will be added and  
12 substations will be upgraded or even reconstructed so that  
13 people somewhere, mostly Minnesota, will have more electricity  
14 as they need to tap into it. And if they don't need it, their  
15 utilities can really improve their bottom lines by selling it  
16 to folks pretty far away, but probably still in MAPP, mostly in  
17 Minnesota or even further away in MAPP, our regional power  
18 pool.

19           All you have to do is volunteer your child, most  
20 likely as yet unborn, for a special game, the cost benefit  
21 lottery. In this special lottery, the child wins if his number  
22 does not come up. If the child's number does come up, he gets  
23 to have neurological impairment. Maybe behavioral problems or  
24 learning problems or maybe just ants in his pants. Maybe he  
25 will really luck out and just have a few points shaved off his

1 IQ. They will never be missed, kids are lovable no matter.  
2 Your child could suffer neurological impairment because his  
3 mother ate mercury-tainted fish. Fortunately, you can take  
4 comfort that he at least lives in South Dakota, where mercury  
5 is less toxic than it is in Minnesota. Believe it or not, once  
6 that mercury gets across the border into Minnesota, it  
7 immediately becomes one-third more dangerous. A Minnesota  
8 regulatory official told me, if I understood rightly, their  
9 action level for a mercury advisory is two parts per million,  
10 whereas South Dakota allows three parts per million.

11 Or the child could turn out bipolar if his mother did  
12 not eat the fish. It seems that omega-3 oils from fish are  
13 essential for healthy neurological development and bipolarity  
14 can be a deficiency disease caused by lack in a mother's diet.  
15 For an undetermined proportion of individuals, vegetable source  
16 omega-3 oils will not suffice. Deep border fish are the best  
17 source, but the fish in our lakes are a not insignificant  
18 source, and what is available to people on tight budgets?

19 Mom just has to eat more fish. Wait, I momentarily  
20 forgot, mom is not supposed to eat the fish. Then again, the  
21 mercury problems can happen even if mom doesn't eat fish. The  
22 child could turn out mildly or even frankly autistic. He  
23 could, if the laws of physics and developmental physiology are  
24 the same here as in Texas, where a study of 1200 school  
25 districts published in 2005 showed a very significant increase

1 in autism in counties having coal-fired power plants. Texas is  
2 not the land of 10,000 lakes or even very many rivers, so not  
3 all those little people are autistic because their moms ate  
4 fish that their dads caught.

5           The relationship between child neurological impairment  
6 and moms or kids under 15 eating fish is well understood. Not  
7 so well understood is harm done to exposure from other  
8 pathways, but that harm is there and evidently measurable. The  
9 increase was 17 percent for every thousand pounds of mercury  
10 released by those power plants, not annually but cumulatively.  
11 Even adhering closely to the requirements of the Clean Air  
12 Mercury Rule, Big Stone I and II will easily liberate more than  
13 that half ton in the first five or six years of combined  
14 operation. Who gets to be in the 17 percent?

15           If I interpret correctly, the Big Stone people say in  
16 their federal draft EIS that they intend to keep their mercury  
17 emissions at the allowable limit of a fictional 144 pounds a  
18 year, fictional because that limit is achieved by actually  
19 emitting 189.6 pounds yearly, after a grace period allowing  
20 them to emit more while they work the bugs out of their  
21 emissions controls. But they get credit for 144 by purchasing  
22 mercury control credits from utilities in other states who  
23 reduce their mercury emissions more than the Clean Air Mercury  
24 Rule requires.

25           They might even buy those credits next door in

1 Minnesota, where the Minnesota Pollution Control Agency is  
2 requiring that any utility with more than 500 megawatts of  
3 generation must eliminate mercury emissions by 90 percent by  
4 2015, some sooner. The Minnesota power plants will be using  
5 technology that Big Stone people have told me in conversation  
6 is too expensive for them, too likely to make the electricity  
7 discouragingly expensive, yet Minnesota MPCA people assure me  
8 that even for Big Stone, the cost would be truly marginal. Two  
9 to three million to install and troubleshoot, about two million  
10 annually to operate thereafter. The Big Stone people are  
11 opting to avoid paying that cost and instead to have some  
12 little kids pick up the tab for life because their number came  
13 up in the neurological lottery.

14           The 144 pounds in itself is somewhat puzzling. The  
15 figure is South Dakota's total allowance under the Clean Air  
16 Rule. Our DENR has a new rule themselves saying that one  
17 utility can't hog the state's whole allowance. And after five  
18 years, 2016 for Big Stone I and II, the utility must even give  
19 back some of its original actual allowance, which would be not  
20 144 pounds but 129.6 pounds, I believe. Yet in the draft EIS,  
21 they make clear they are indeed counting on hogging the whole  
22 144 pounds. By 2018 the federal government will have cut South  
23 Dakota's mercury emissions allowance to 58 pounds. In their  
24 draft EIS, Big Stone people are showing no plan for making the  
25 jump from actual 189 pounds to whatever part of 58 pounds they

1 are entitled to use, and it will be part of the 58 pounds.

2 Surely the state will not allow them to hog the whole 58.

3           Which brings me to request something from the Public  
4 Utilities Commission. I don't know if you can do this. I  
5 think you may feel strongly constrained by rules not to, but  
6 see if you can. Please put off your decision on permitting Big  
7 Stone II until there is a record of decision on the draft EIS.  
8 The project co-owners, as I say, did an excellent job in some  
9 respects on that draft. And we want the power here, but do we  
10 have to take it on those neurological lottery terms? The  
11 omissions and confusions for some other issues in the draft  
12 also practically insure that for the total bucket, some  
13 material changes will be introduced before a record of decision  
14 is rendered. It would be ironic if you would approve the plant  
15 that is submitted to you along with a neurological lottery for  
16 our children. Thank you.

17           MR. RON WIECZOREK: I'm Ron Wieczorek from Mount  
18 Vernon, South Dakota. It was too hot to bale this evening, so  
19 I heard you guys were up here so I thank the commissioner for  
20 the opportunity to speak here this evening.

21           VICE-CHAIR JOHNSON: What was your name again?

22           MR. RON WIECZOREK: I'm Ron Wieczorek from Mount  
23 Vernon, South Dakota, and I would like to address, and I would  
24 like to commend the developers of the plant and thank the  
25 commissioners for doing their public job of making sure that

1 the general welfare is provided for and taken care of. And  
2 when I look at the economic crisis the nation is in right now  
3 with -- the past several, oh, well, six- to eight-, ten-month  
4 period of the inflation on commodities and energy costs in this  
5 country, and you can take copper, for instance, in the past  
6 year it's went from \$2,000 a ton to \$9,000 a ton, and it's  
7 dropped back now of course. But anyway, if you look at the  
8 value of copper in a penny, it wouldn't take long and it would  
9 be a dollar. So we have a monetary system where a dollar is  
10 worth a penny.

11           Those are the things that I think about, and right now  
12 I think about the rest of our national economy and our local  
13 economy also, where we are looking at the auto sector, General  
14 Motors going into bankruptcy most likely, Delphi already in  
15 bankruptcy, many of our airlines are already in bankruptcy, and  
16 we have to come up with another source or a more efficient use  
17 of energy.

18           And one of the things that I have been very excited  
19 about and promoting since I was in Germany in 1993 and rode on  
20 the Megala train (phonetic) at 300 miles an hour where you have  
21 the potential to move 1500 people at 300 miles an hour with  
22 less energy than it takes to drive my ton truck down the road,  
23 I think these are things that we need to look at. And it's  
24 essential that we have plants like Big Stone I and Big Stone II  
25 to provide that. They have to be environmentally clean and I



1 commend the people on the development up there and to me it  
2 looks like it has been environmentally clean.

3 I think right away with something like this, we could  
4 basically give ourselves a transportation system and we could  
5 put General Motors and Delphi people back to work. That  
6 machine tool sector is essential to the security of the United  
7 States of America. But they have to have the energy sources to  
8 run these type of transportation systems with. And that's what  
9 Big Stone II is all about in the big picture, I think.

10 It will vastly develop South Dakota and the nation,  
11 especially if we could run a segment of this from, say, Mexico  
12 City of 25 million people to Fairbanks, Alaska and parallel it  
13 along the Missouri River, parallel it along Highway 83 and then  
14 every hundred miles start the development of a new city. This  
15 is how Abraham Lincoln brought the economy out of a recession  
16 and did not use economics 101, the nickel on the ticket to pay  
17 for it. It was all the new development that paid for it in the  
18 process. And it was essential to the future. And that's what  
19 Big Stone II is, it's essential to the future, the young people  
20 need this. Fifty years in the future, we need that.

21 We cannot depend on sources of biofuel such as  
22 ethanol. It takes -- actually I believe most of the studies or  
23 many of the studies refer to taking two and a half gallons of  
24 diesel fuel to make a gallon of ethanol. How do you generate  
25 ethanol at \$7.24 a gallon now and make statements like we are

1 going to raise the corn prices, when my local elevator this  
2 afternoon was \$1.67, and ethanol is -- corn has gone in '97  
3 from 4.50 to a dollar and a half and we have been adding  
4 ethanol plants all the time. I really don't see any benefit to  
5 ethanol, especially if it's -- you know, you can't get more  
6 energy out of it than you put into it.

7           Big Stone II is not that case. It's a very good,  
8 clean source of energy that we need for the future, magnetism,  
9 and also I think the potential is even there for hydrogen -- to  
10 tie in with hydrogen production, which will be a fuel of the  
11 future.

12           One other comment, I look at what the Chinese are  
13 doing right now, they have become our biggest competitor. They  
14 have just finished Three Gorges Dam and if I read it right,  
15 they are able to produce 17 times the electricity on one dam  
16 than we are producing on the whole series of Missouri River  
17 dams. They are moving very rapidly with nuclear energy, as I  
18 seen in France and Germany and Europe when I was over there,  
19 very cleanly, very efficient, a very cheap source of fuel, I  
20 think we have to look at that.

21           One statement that I picked up on here and I just  
22 wrote down from president -- China's President Ziemann's trip to  
23 the United States was creativity is the source of national  
24 wealth and it's an inexhaustible source, and I thank you guys  
25 for the creativity that you have put into this project.

1 MR. SMITH: Thank you, Mr. Wieczorek. Does anyone  
2 else wish to speak? Pat, I see you back there.

3 MR. PAT SPEARS: I do, if all the public comments are  
4 done.

5 MR. SMITH: Ms. Stueve, I think we have seen you  
6 before.

7 MS. MARY JO STUEVE: I know, it's a good thing I'm a  
8 Gemini. Am I Mary Jo or am I Clean Water Action? I am Clean  
9 Water Action tonight. Mary Jo representing Clean Water Action.  
10 And I speak tonight on behalf of South Dakota Clean Water  
11 Action. Our office is located at 231 South Phillips Avenue,  
12 Suite 250, Sioux Falls.

13 Last September 13th, 2005, there was a public hearing  
14 before the South Dakota Public Utilities Commission in Milbank  
15 on the proposed Big Stone II project. A request was made by,  
16 quote, unquote, Stueve at that time to have the draft  
17 Environmental Impact Statement address total maximum daily  
18 load, better known as TMDL, for the mercury levels in Big Stone  
19 Lake and in waters within a 50-mile radius. The transcript  
20 from the Milbank hearing reads, with Chairman Hanson speaking,  
21 quote, Nancy from WAPA, would you please make an attempt, if  
22 you can -- if you cannot, just tell me -- will the  
23 Environmental Impact Statement that WAPA is entering address  
24 those, brackets, mercury TMDL questions by Stueve, issues?  
25 Nancy Werdel speaking, quote, it will have water quality

1 impacts as part of that study. And I took a couple of notes,  
2 and we'll take those back and put those as part of our scoping  
3 as an inclusionary thing into the EIS.

4           The above TMDL request was specifically made by Stueve  
5 because in the application for Big Stone II, the applicants did  
6 not calculate, analyze or study mercury impacts on humans or  
7 the environment. The applicants did not measure mercury levels  
8 or risk and neither does the recently released draft EIS  
9 address current mercury levels or measurements in the water or  
10 fish. In other words, we do not have any information from the  
11 proposed Big Stone II project on mercury load currently in the  
12 water or in the fish that not only could but would be increased  
13 by continued and/or increasing mercury emissions from the  
14 proposed Big Stone II.

15           Because of how mercury bio-accumulates in the  
16 environment, operation of both plants, even if at the same  
17 mercury emissions from 2004 of 189 pounds, decidedly increases  
18 mercury accumulation and degradation in the environment. What  
19 will this mean for future real estate development along the  
20 lake? What will this mean for future revenues from tourism and  
21 the fishing industry? Who will want to come and reside, fish  
22 or swim in a toxic laden lake? Will we have not only increased  
23 health risk but also a socioeconomic bust?

24           According to South Dakota Codified Law 49-41B-22, it  
25 is the applicants' burden of proof to establish that, two, the

1 facility will not pose a threat of serious injury to the  
2 environment nor to the social and economic condition of  
3 inhabitants or expected inhabitants in the siting area, and  
4 that, three, the facility will not substantially impair the  
5 health, safety or welfare of the inhabitants, and four, the  
6 facility will not unduly interfere with the orderly development  
7 of the region.

8           Clean Water Action members are deeply concerned about  
9 the inconsistency and the lack of analysis on mercury and other  
10 toxic emissions. The application for the proposed Big Stone II  
11 does not address in a calculated, cumulative manner what the  
12 impact would be on human plant and environment surrounding the  
13 area. Neither does the draft EIS. In fact the draft EIS shows  
14 and records an expected release of 399 pounds of mercury into  
15 the environment once Big Stone II comes on line, as does  
16 evidence submitted via discovery, which can be found in Stueve  
17 Exhibit 1-G.

18           Even though applicants have recently submitted a  
19 letter giving voluntary commitment to emit no more than 189  
20 pounds of mercury, South Dakota budget for future mercury  
21 emission under the Clean Air Mercury Rule falls to a 144-pound  
22 requirement in 2010, then down to 58 pounds by 2018.

23           What about health risk cost? Our members are  
24 concerned. Why should local populations bear the brunt of  
25 toxic risk? Mercury control technologies are available now and

1 the need for such very clear. Model rules have been crafted  
2 providing states with guidance, for example, Regulating Mercury  
3 From Power Plants, a Model Rule For States and Localities,  
4 November 2005 State and Territorial Air Pollution Program  
5 Administrators, Association of Local Air Pollution Control  
6 Officials. We can do better for our children, our health, our  
7 water, our future. In order for a decision to be made,  
8 everything should be on the table and people should know what  
9 are we risking and what is the tradeoff?

10 Clean Water Action South Dakota recommends further  
11 evaluation and calculation of the mercury risk before a permit  
12 is issued for the proposed Big Stone II. Clean Water Action  
13 contends that applicants have failed to provide proof that Big  
14 Stone II as proposed will not pose a threat of serious injury  
15 to the environment, nor to the social and economic condition of  
16 inhabitants or expected inhabitants in the siting area. Nor  
17 have applicants provided proof that the facility will not  
18 substantially impair the health, safety or welfare of the  
19 inhabitants or unduly interfere with the orderly development of  
20 the region.

21 Clean Water Action South Dakota sincerely thanks the  
22 Public Utilities Commissioners for the opportunity to comment  
23 in this matter.

24 MR. SMITH: Thank you, Ms. Stueve.

25 MR. PAT SPEARS: Good evening, John, and members of

1 the commission. I thank you for having the opportunity to  
2 speak to you, too, to address some concerns that our voice on  
3 behalf of the Intertribal Council on Utility Policy. I  
4 represent tribes not only in South Dakota but in surrounding  
5 states as well, in North Dakota, Nebraska, Wyoming and with  
6 affiliates in other regions, including Minnesota tribes and  
7 other organizations there. We look at issues in utility policy  
8 on tribal lands, from regulatory, educational, as well as  
9 environmental and economic perspectives.

10 We also have a real large emphasis on wind energy  
11 development and are managing the development of an 80 megawatt  
12 intertribal wind project on eight reservations with several  
13 others poised to come on and join in this effort. We are  
14 looking at community wind power as well as municipal wind power  
15 markets and also the federal government as a potential  
16 purchaser of wind energy for federal facilities and needs for  
17 other federal agencies, as well as other cities that are in our  
18 region and outside our region that are aware of the tremendous  
19 wind energy potential that we have here in South Dakota.

20 Just as an example, I know many of you as members of  
21 the commission are aware of this, but I want to point this out  
22 for the record here because I do want our comments to be  
23 entered into the record and I would like to submit the draft, a  
24 written document tomorrow, your deadline. I thank you for that  
25 opportunity. I'll just summarize them here tonight.

1           But we sit in the middle of a vast resource of wind in  
2 this country and according to estimates by the National Energy  
3 Laboratory, we have over 276,000 megawatts of wind energy on  
4 tribal lands alone and we also have the benefits of being all  
5 on the Western Area Power Administration's transmission system,  
6 much of which originates and transverses tribal lands. And we  
7 have given up much for the development of that system in the  
8 way of sacrificing lands for the Missouri River reservoir  
9 system for flood control primarily with power production kind  
10 of as a by-product really. If all the dams are full and  
11 running at maximum capacity, that capacity is about 2500  
12 megawatts of energy annually. Well, we can do that on tribal  
13 lands easily. So can many farmers and ranchers and communities  
14 in South Dakota. We enjoy the most consistent wind, I think,  
15 of any state in the northern plains and have more transmission  
16 access points here.

17           But it's not only wind energy that we are concerned  
18 about. As tribal people, we are very conscious of impacts on  
19 our land and our water, the ecosystems, the plant nations, the  
20 animal nations and the fish nations, as well as the unborn  
21 generation. We think down the road quite a bit. It's  
22 something we share with other tribes in that we think ahead  
23 seven generations of impacts today. That's something we have  
24 learned from our grandfathers. We may have strayed a bit in  
25 some decisions we make today to meet the need for revenue,



1 jobs, employment that everybody needs out here in rural America  
2 and the northern plains in particular that we are all very  
3 aware of.

4           Some of those economic impacts here that we are still  
5 recovering from is the flooding of the Missouri River. Our  
6 economies have never been returned quite to the state that they  
7 were at that time. We got along pretty good. I always quote  
8 one of our elders who has passed on now to the spirit world,  
9 but he was a Standing Rock Lakota, his name is Vine Deloria,  
10 many of you have read of him. He's a well-known scholar, but  
11 he equated the flooding of the Missouri River and the impacts  
12 on all the tribal nations as probably the second most  
13 significant impact to the economies, culture and ecosystems of  
14 the tribal nations since the killing of the buffalo.

15           I believe that. I know the impacts of that flooding,  
16 what it's had on us, our communities, and we have been trying  
17 to rebuild and live a -- with an increasing population on  
18 not -- with not enough land to go around to sustain everybody  
19 and having all of those problems that resulted from that and  
20 our best land is gone.

21           So we take a look at environmental justice, that's  
22 this 80 megawatt wind project has been recognized by an  
23 interagency task force in national competition, comparison, if  
24 you will, with brown fields, other things that are polluted,  
25 other actions that have resulted in harms to the environment

1 and human health and such, and it's been accepted. They have  
2 never looked at an issue like that before, but the way we  
3 presented it, it was accepted. So I don't mean to dwell on  
4 that right now, but I want to use that as a background for some  
5 economic justice we feel we have coming and one of those -- one  
6 way that's possible is the development of wind energy  
7 resources.

8           We know the wind doesn't blow all the time, but it  
9 blows about half the time here and we are looking to partner  
10 with the utilities that are here. Our rural electric co-ops,  
11 of which we are members, we are members of communities served  
12 by municipal power companies and we are served by  
13 investor-owned utilities on reservations, too. And those over  
14 by Big Stone are Sisseton and Flandreau, who are members of  
15 Intertribal COUP, and virtually all of the river tribes as well  
16 as the Oglalas, and Rosebud, Yankton, the Omahas in Nebraska,  
17 we are all aware of power needs and the management issues on  
18 the Missouri River and we think wind energy can impact all of  
19 those.

20           So we are looking for creative ways to partner to  
21 provide power not only for our communities but for this region  
22 to meet new load growth and new demand and serve the new  
23 market. But we want to do so carefully. There's three issues  
24 we have here are a concern for our environment, global warming,  
25 and the economic impact of wind energy for this whole region.

1 I share the comments made by some of the other people here and  
2 those that I have read from other proceedings and that I have  
3 read on line and in the papers in that I hope you take a very  
4 good look at the environmental impacts and analyze it and not  
5 rush into any decisions here without knowing full well the  
6 complete mercury output as well as the sulphur dioxide and the  
7 nitrous oxide, acid rain and smog.

8           You know, people in South Dakota think we have got a  
9 pretty pristine environment, we don't see a lot of that smog,  
10 but you can see it if you are in North Dakota before the wind  
11 comes up, you wake up in Bismarck and look to the east, it's  
12 there. I don't wake up in Milbank very often, I don't think I  
13 ever have, I have driven through there pretty early, but I  
14 think you might be able to see some of it. Around where  
15 there's other coal plants you can see it. There's particulate  
16 matter there. We have got a lot to do to clean up existing  
17 emissions here and the technology is being researched to do  
18 that.

19           I have high hopes that coal gasification is going to  
20 be one of the answers to controlling emissions and pollutants  
21 as well as CO2 and sequestering that back into the earth or  
22 other ways. I really hope that there can be a partnership with  
23 the coal industry and wind energy, because we need to -- we  
24 need to do that to provide our own needs as well as meet some  
25 of those large needs in other areas, and you all are very well

1 aware we need to increase transmission to access those market  
2 areas. And with this new plant here, I would hope that that is  
3 a major consideration also, that you would partner with those  
4 entities that want to develop wind energy and move it to urban  
5 areas to the east of us.

6 But we know the wind blows in every direction here.  
7 Some places it's longest and strongest from the northwest, but  
8 we find out in our met tower studies at least down here in the  
9 middle of South Dakota, down in Rosebud and some other places  
10 that it's coming from the south. I don't know if that's  
11 changed in the last 10 years or not, but it's surprising that  
12 your most consistent wind is coming from there in someplaces.  
13 I don't know how the wind blows over there, but there's met  
14 towers around in that area and you might do well to check on  
15 that and just so you can take a look at a windrows or a graph  
16 that shows where the most consistent wind comes from for most  
17 of the year.

18 My concern again here, it has to do with global  
19 warming. That's been a debatable issue for years, but I'll  
20 tell you now, five years ago a lot of folks didn't think it's  
21 really an issue, but we keep breaking records for the hottest  
22 July on record. Ice flows are breaking off of Antarctica the  
23 size of Connecticut and Rhode Island. They say you are going  
24 to be able to take a boat ride across the North Pole in a few  
25 years. I gotta throw my lot in with 5,000 scientists around

1 the world that says this is happening.

2           You can argue about the cause of it all you want, but  
3 it is happening and one of the causes we feel is emissions from  
4 both our transportation and from burning fossil fuel for  
5 energy, primarily coal. So we have got to do something about  
6 it. We have got to control that, the pollutants that come from  
7 it, and also CO2. That hasn't been treated as a pollutant  
8 before, but there's a case before the Supreme Court now with  
9 about 10, 12 states, I believe, now that are saying that it is  
10 a pollutant, and Uncle Sam, you better treat it as one because  
11 it's causing some serious impacts in urban areas in human  
12 health. That's the the biggest one here, human health and  
13 infrastructure.

14           If a lot of folks don't believe it's happening in an  
15 industry, it's pro and con, there are groups that are planning  
16 for the future and what to do about it. Probably the biggest  
17 industry or business that is looking at global warming and its  
18 impacts is the insurance industry. They have got the best data  
19 on what's happening in the climate change of anybody because  
20 that's their business. We keep breaking records for payouts  
21 from natural disasters. Also, there are some places they will  
22 not insure any more.

23           Things are happening, things are changing. We have  
24 standards for pollution control that are set for the mercury,  
25 SO2, NOX and such. They are different in each state, as has

1 been pointed out. How does that change across a boundary line  
2 that is on paper? But you don't notice it much when you are  
3 driving, walking or riding a horse over there. We know that  
4 very well from having our treaty lands, from Canada down into  
5 Kansas to the Big Horn Mountains and over to Wisconsin, the sun  
6 literally used to rise and set on the lands of the Lakota,  
7 Dakota, Nakota nation.

8           So climate doesn't know any boundaries either and  
9 neither do things that happen from climate change such as  
10 different types of disease, bugs, insects that are coming  
11 north, malaria, dengue fever, West Nile disease. Unheard of  
12 when we were growing up, right? And things are happening. So  
13 we have got to do something about it, we gotta be aware of it  
14 and use the technologies that's there. Be creative, as I heard  
15 mentioned here. There is no other time but now where we need  
16 to do that and partner together, because we are not going  
17 anywhere unless South Dakota, federal government or others  
18 would like to give us back some of our land. We might expand a  
19 bit, but we are here, we are here for the long haul and we have  
20 a median age of 18 compared to 30 and going up in the rest of  
21 this country. So we have got a big, big responsibility to  
22 provide for our youth and to protect what little bit of land we  
23 have left and find ways to sustain ourselves.

24           So we are looking at survival for the future, we are  
25 looking at the jobs that are in renewable energy, and we come

1 to this climate change realization not only from our beliefs  
2 and our prophecies and our ceremonies where these messages are  
3 still coming through, but from a group of scientists that  
4 worked with the U.S. Global Change Research Program and did the  
5 national assessment on impact to climate change. Bob Gough,  
6 who represents the Rosebud Sioux Tribe as the secretary of  
7 Intertribal COUP and I, we co-chaired the Native Peoples Native  
8 Homelands Workshop in that assessment and helped write some of  
9 those impacts. We helped compile and gather it from this whole  
10 country because it was literally Indian Country at one time,  
11 and still is or isn't, depending on your perspective. But it's  
12 where we live and where we have cultural history of place and  
13 such. So we put spiritual leaders and tribal environmentalists  
14 together with scientists and the scientists' comments were that  
15 we knew that you people had traditional knowledge but what we  
16 heard here, we are literally blown away. So we knew this was  
17 coming, our grandfathers and grandmothers told us, and they  
18 still do.

19           So we gotta do something about it and one of the  
20 solutions is renewable energy and we are not alone in that  
21 area. I know the commission shares some of the potential and  
22 the hope that we can develop the wind resources that we have  
23 here for the tremendous economic development that it can  
24 create, and to support industries that are there. There is the  
25 same kinds of jobs in building trades, electricians that you

1 need with coal plants you need with wind. I look to  
2 partnerships that way. So I just want you to take a real hard  
3 look at the resources that we have left that are becoming  
4 scarce, and water is not the least of which.

5           It takes a lot of water to produce steam, you know, to  
6 turn a turbine. It takes a lot of water to cool a coal plant  
7 also. Look at those resources and be able to estimate that  
8 into the future, taking a look at that and maybe you get a  
9 little more rain over there in the east now because  
10 precipitation patterns have changed from west river to east  
11 river big time and so I just want to say that we are not alone  
12 in our concern for the environment. Maybe people don't voice  
13 it as often as they would like to, but we share with farmers,  
14 ranchers and other communities in the state of South Dakota  
15 that surrounds all of our tribal lands here.

16           We care about our children, we care about our earth  
17 and the ecosystem that we live in and we want to protect it.  
18 We also want to have jobs and we want to have a standard of  
19 living that's fair, that's equal to what it takes to provide  
20 for our family these days, and we have unemployment at 50 to 80  
21 percent there that nobody else does. So nobody is hungrier for  
22 new jobs, new projects than tribal people. Tell me, if there  
23 are, I don't know where, but we are not in so much of a hurry  
24 that we will make decisions without all the facts and not  
25 weighing all the impacts.



1           So that's my comments to you, to consider looking at  
2 everything from a larger, wholistic perspective because we know  
3 that everything is related. We are all connected here in this  
4 area, the rest of this western hemisphere, around the world.  
5 We have a saying that's kind of like our amen when we pray,  
6 it's called (speaking Lakota), all my relatives or we are all  
7 related, and that means everything from us here to our  
8 relatives and our families to all of the plant nations, animal  
9 nations, all of creation across the earth and out to the stars.  
10 So think about it like that once when you go home or go out on  
11 a hill. Take a good, hard look and look deep. We have time to  
12 weigh these decisions, so let's get the facts and partner  
13 together to make a sustainable future for our children.  
14 (Speaking Lakota.) I thank you for this time.

15           MR. SMITH: I was just going to -- you didn't  
16 introduce yourself to the audience, Pat. This is Pat Spears,  
17 who has been my friend for 35 years. Do the commissioners have  
18 any questions?

19           VICE-CHAIR JOHNSON: I would like the record to note  
20 that John Smith does have a friend apparently.

21           MR. SMITH: He's not admitting it.

22           MR. PAT SPEARS: Thank you.

23           MR. SMITH: Thanks a lot.

24           MR. BOB GOUGH: Good evening. I'm pleased to be able  
25 to have the opportunity to address the Public Utilities

1 Commission here in South Dakota. My name is Bob Gough,  
2 G-O-U-G-H. I'm an attorney and my training is also in cultural  
3 ecology. I did my graduate work towards my Ph.D. in cultural  
4 ecology and anthropology at the University of Wisconsin in  
5 Madison and my law degree at the University of Minnesota in  
6 Minneapolis. For the last 20 years I've had the privilege and  
7 honor of living and working on the Rosebud Sioux Indian  
8 Reservation.

9 I was the initial director of the Tribal Utility  
10 Commission, established in 1994, and have served -- stepped  
11 down from that director position and have served as a  
12 consultant for them through the years since. I serve also as  
13 the secretary of the Intertribal Council on Utility Policy, one  
14 of the Rosebud delegates, and have worked with the Intertribal  
15 Council on the work that Pat Spears has referred to with regard  
16 to tribes across North and South Dakota, Nebraska, now  
17 Minnesota and Wyoming looking at energy development, wind  
18 development and the like.

19 I've also had recently the privilege of serving on the  
20 Western Governors Association's Clean and Diversified Energy  
21 Advisory Committee, and in that capacity, I sat on the  
22 committee itself and on the wind and transmission task forces  
23 and sat in periodically on some of the other they call them  
24 stovepipe task forces, the different technologies. The Western  
25 Governors Clean and Diversified Energy Advisory Committee

1 looked at wind, solar, geothermal, biomass, energy efficiency,  
2 and what was initially called clean coal and then was changed  
3 to advanced coal technologies to be able to look at how the  
4 western states, and in this case that included North and South  
5 Dakota, although we are on the other side of the grid for the  
6 most part of the western grid, how we could include and realize  
7 the goals set by the Western Governors of 30,000 megawatts of  
8 clean energy, new energy in the west developed between now and  
9 2015 over the next 10 years.

10           This is the planning horizon that one would expect  
11 likely for any new, major new power plants and it seemed like a  
12 long way away when we started the discussions two years ago and  
13 now we are in the better part of eight and a half years from  
14 that goal. They also looked at energy efficiency goals of  
15 reaching 20 percent of energy efficiency, greater efficiency in  
16 the west by the year 2020. So there's some pretty admirable  
17 and what we believed was achievable goals for the west to be  
18 able to develop new energy projects throughout the west that  
19 would have less impact on the pollution, less impact on the air  
20 and water resources, and with a focus on the reduction of  
21 carbon dioxide emissions.

22           I went through the degrees and the universities of  
23 where I got them to sort of explain to you that I have been  
24 moving up wind from Wisconsin to Minnesota to South Dakota and  
25 the air has gotten increasingly better with each move, I'll tell

1 you that. There is something to be appreciated about that wind  
2 shed, something to be appreciated about the resources here, and  
3 while I see that the governor in Minnesota has just signed  
4 recently a law with regard to mercury, that law does not quite  
5 extend across the border into South Dakota, although any  
6 emissions produced here will end up there. We have looked at  
7 it in terms of the wind industry, we have watched a lot of  
8 dollars just flying east in the prevailing westerly winds into  
9 Minnesota and seeing that economy realized there. We are very  
10 much interested in seeing that economy realized here in South  
11 Dakota.

12 But the issue of where the emissions go with regard to  
13 carbon dioxide isn't important. It's critical in terms of  
14 things like mercury, NOX and SO2, but for CO2 it's not  
15 important. It's the total accumulation of CO2 in the  
16 atmosphere that is what most of the world's scientists who  
17 seriously study climate have indicated is what is responsible  
18 for global warming, so your carbon dioxide, methane and other  
19 is gases. Water vapor is probably the most prolific gas, but  
20 that only stays in the atmosphere for about a week. Carbon  
21 dioxide stays in the atmosphere for about a century. What we  
22 put in today will be there 100 years from now. Mobridge will  
23 celebrate its bicentennial with the carbon we put in their  
24 today. I was just up there for the beginning of their  
25 celebrations this week.

1 I bring that up because I've had to spend some time at  
2 the western -- working with the Western Governors in Denver,  
3 working with the National Renewable Energy Lab, also located in  
4 Denver and in Boulder, and I've spent some time in the Rockies.  
5 And what I've noticed in the last couple of years, being there  
6 on and off, is that that's where our Missouri River comes from,  
7 not Colorado, but up in Wyoming and Montana. And this Missouri  
8 River we are seeing now has the lowest record levels of water  
9 since we have been keeping records. If there were no dams on  
10 the river and we just counted on the flowage, the natural  
11 flowage, I think that the Lewis and Clark celebrations could  
12 have terminated in Bismarck. That would have been about as far  
13 as they could get without going horseback.

14 We are looking at situations now in the Rockies with  
15 the snowpack where we not only get the -- we fail to often get  
16 enough snowpack to meet the averages that we have seen in the  
17 past, and in Colorado this past year, they had above average  
18 snowpack and everyone seemed delighted that the drought was  
19 over. And that was in January and February and March. April  
20 and May were usually the wettest months of the year in that  
21 region of the Rockies. This year they were two of the driest  
22 that they have ever had on record. What they have had were  
23 warm winds, very warm winds and very dry winds and what's  
24 happening with the snow in the Rockies this year is that it  
25 fails to melt, even though they had above average snowfall,

1 snowpack, it failed to melt.

2           There's a process called sublimation and the snow just  
3 turned to water vapor, it was that warm and dry, the air just  
4 sucked it up as water vapor and it didn't make it into the  
5 streams. This is what we are seeing in the headwaters of the  
6 Missouri River. We are seeing a very major change in where the  
7 water comes from. We are seeing a lot more of that water  
8 falling to the eastern part of South Dakota and into Minnesota  
9 and we will see floodings and the like. We have seen those  
10 kinds of weather extremes coming into play. We have seen that  
11 with losing Grand Forks a few years back.

12           What the issue is for this kind of shift, this kind of  
13 change is that we are seeing more and more of the water that  
14 does come this way falling further and further east and not  
15 behind the dams. It's falling below the dams, east or too far  
16 east to be able to fill in back behind the dams. So as we look  
17 to relying on hydropower, we are going to find that we may be  
18 short circuiting that natural cycle of snow back in the  
19 Rockies, precipitation throughout Montana, Wyoming, western  
20 Dakotas and water behind the dams. And if you look at what the  
21 climate scientists up in Grand Forks, North Dakota, for  
22 example, at the aerospace program, who have been looking at the  
23 impacts of global warming throughout the west, they have said  
24 that the kinds of years that we have seen, the warmer, dryer  
25 years, are what we are likely to expect under global warming

1 scenarios.

2 Many of the models that were put in place to look at  
3 global warming were extremely, extremely conservative. They  
4 wanted to be able to withstand any kind of scientist scrutiny,  
5 and what that meant was they have put rather conservative  
6 assumptions into place and what we are seeing today are some of  
7 the forecasts that were 20, 30, 40 years down the road, we are  
8 starting to see those things happen already, because those  
9 assumptions were perhaps a bit too conservative. I say that  
10 because you are faced with the decision of permitting something  
11 that is going to have an impact for the next 50, 60 years.

12 Something that may be considered state of the art when  
13 a permit process was begun several years ago may be based on  
14 some assumptions that no longer quite hold, policy assumptions  
15 that no longer quite hold and state-of-the-art technology  
16 assumptions that no longer quite hold. We are on the verge of  
17 looking at a whole new set of technologies coming down,  
18 particularly for the coal industry, a vast resource that we  
19 have in the west, not necessarily in South Dakota, we are going  
20 to have to import coal, we are going to have to bring it in  
21 from someplace else, probably going to have to bring it in by  
22 rail, probably going to be running pretty near where I have to  
23 live and drive back and forth, go up and down north and south  
24 in this state and looking at, just on the DM&E proposal, 40  
25 trains a day, 100 cars long, and that's not counting the

1 empties coming back.

2           We are looking at the energy that that resource can  
3 serve, it can come from coal, it can come from a variety of  
4 other resources. It can come from an abundance of the wind  
5 resource we have scattered across the entire state and we could  
6 see income coming not just to one or two communities or one or  
7 two enterprises, but we could see income coming to ranchers,  
8 farmers and reservations all over this state. We can see a new  
9 economy being built in this state based on renewables,  
10 supplement it with hydro, supplement it with coal, but we are  
11 going to be able to need to envision how do we want to be in 50  
12 years. Do we want to have water at all in the west river?

13           I know people here were talking about the problems  
14 with wind and how unsightly they are and I'm sitting here  
15 looking over your shoulders at a poster that has South Dakota  
16 changing and changeless with a wind turbine. Now, that's cute,  
17 it's an antique, although we have got 62 of them working  
18 between my home in Mission and the Nebraska line pumping water.  
19 So they are functional and they don't look so bad once you get  
20 used to them. And a lot of local landowners have decided that  
21 the beauty of those goes up with your ownership interest. Not  
22 a bad thing.

23           Well, I put that out on the table for you to consider,  
24 that the impacts of your decision will have impacts on this  
25 state and this country and this globe for the next, over the



1 next 50 years and then some. There's going to be costs  
2 associated with this decision. Whatever gets approved through  
3 this permit process and gets built is going to be facing a  
4 change in regulatory schemes as they come down over the next 50  
5 years, certainly in the next 20 years and probably within the  
6 next 10.

7           This is what the Western Governors were anticipating  
8 in looking at how do we begin to shift, how do we begin to  
9 build in another direction, not just the business as usual  
10 direction. Coal can provide a vast storehouse of energy. It  
11 can provide a lot of other resources. We know the same thing  
12 with oil. But we look at coal, we see that the state of the  
13 art today is not IGCC, it's not -- it's not requiring  
14 sequestration of the carbon dioxide that comes out of those  
15 plants. That's not where the state of the art is. But that's  
16 where it's going to be in a very short time. And that is where  
17 the recommendations of the Western Governors want to see it go.

18           The Western Governors have issued a report and within  
19 that report called Clean Energy, a Strong Economy and a Healthy  
20 Environment, and in that there's a series of appendices dealing  
21 with each of the fuel types. And the advanced coal appendix,  
22 it happens to be the first, and I'll just read a portion of it  
23 to you into this record. The Advanced Coal Task Force reached  
24 a carefully crafted agreement with regard to its support for  
25 advanced coal technologies. The language of that agreement and

1 the state level incentives targeted only to tier one and tier  
2 two technologies that were agreed to are listed below. In  
3 addition to the state level incentives, CDIAC (phonetic) agrees  
4 to support federal incentives, but here's -- get to the point  
5 of what the governors are looking forward to.

6           Advanced Goal Agreements -- Advanced Coal Task Force  
7 agreement on advanced coal technologies. A, support for  
8 continuing efforts to improve the efficiency and environmental  
9 performance of all advanced coal technologies examined by the  
10 task force. The task force technical work group examined the  
11 costs, performance and environmental characteristics of a  
12 variety of commercially available and emerging advanced  
13 coal-fired electric generation technologies, including  
14 supercritical and ultra supercritical pulverized and  
15 circulating fluidized bed combustion technologies, integrated  
16 gasification combined cycle technologies. The technology work  
17 group report found that the advanced technologies examined  
18 typically demonstrated higher performance levels and lower  
19 emissions of critical pollutants, toxic pollutants and carbon  
20 dioxide emissions than the new subcritical designs as well as  
21 the current fleet of pulverized coal plants now in operation.

22           The task force supports continuing efforts to improve  
23 the operational and environmental performance of all the  
24 advanced coal technologies listed in the technology report  
25 beyond current performance levels, with the ultimate goal of

1 achieving near zero emissions in a competitive cost -- at a  
2 competitive cost of electricity. The second short paragraph is  
3 B, support the incentives for the development of advanced coal  
4 technologies that are not yet commercially viable and operate  
5 with superior environmental performance. I have a copy of the  
6 entire report on disk, which I would like to submit for the  
7 record to the commission.

8 As we were welcomed in the opening statements, you are  
9 looking to see what kinds of policy concerns might be important  
10 in your deliberation on this permit. I would ask that you look  
11 to what the Western Governors have come up with in terms of the  
12 best thinking they have got for at least the next 10 years.  
13 Look carefully at the opportunity that you have in being  
14 extremely deliberate. I don't know that South Dakota, in fact  
15 our Governor is going to be -- is the new chairman of the --  
16 the current chairman this year of the Western Governors  
17 Association. Do we want to be the first state to permit the  
18 last of the old school technology?

19 Can we find ways to make sure, in this permitting  
20 process, that whatever is built at Big Stone for Big Stone II  
21 reduces the emissions, doesn't just extend the emissions,  
22 current emissions out of Big Stone I, has certain emissions  
23 capturing ready capacities built into it. We may be looking at  
24 some very inexpensive or competitive power coming out of it  
25 under today's regulatory scheme, but you lay a carbon tax, you

1 lay liability for CO2, you lay a number of these other kinds of  
2 requirements coming down either regionally or federally on top  
3 of that, and are we selling the people in South Dakota and  
4 energy going into Minnesota something whose prices are going to  
5 be guaranteed to increase because of our failure at this point  
6 to take the proper precautions, to see what's coming ahead?

7 I heard that one teacher or school official say we  
8 don't know what's going to come, we didn't know in '77 what it  
9 was going to look like today, and he's absolutely right. The  
10 best guess we have is that from today over the next 10 years,  
11 there is going to be some major changes coming in technology  
12 and likely regulation, liability, and all of that is just a  
13 portion of what's coming.

14 We are looking at some -- if the weather trends  
15 continue as we are seeing them, we are looking at some very  
16 serious issues for west river, for the rest of the state, and  
17 permitting something on the eastern side of the state may seem  
18 to have little relevance to what happens in the west, but to  
19 the extent that that is causing less water coming into our  
20 system, that is something that we are very, very concerned  
21 about.

22 I will close with just a note, that at the EERC up in  
23 North Dakota, they did some studies on global warming. They  
24 did it on climate change, not on global warming, they did it on  
25 climate change and they were not looking ahead as most of the

1 IPCC studies have been going ahead, what's coming down in the  
2 next 20, 30, 50, 100 years, they looked to the past. They  
3 looked at lake sediments across North and South Dakota and they  
4 looked at sediment levels of the last 2,000 years to see what  
5 the natural variations have been, because you really don't know  
6 what we may be in store for, maybe they are within the realms,  
7 in the range of natural variations.

8           But they looked in the past and what they found that  
9 this region here has experienced just in the last 2,000 years,  
10 wet and dry cycles, wet cycles with little drought periods, dry  
11 periods, and dry periods with little wet spots here and there,  
12 and these cycles could last a century, century and a half for  
13 the last 2,000 years. And I would postulate that we have been  
14 looking at the last seven to nine years certainly in the  
15 western part of the state as seeing a drought situation, a  
16 persistent chronic drought situation. And maybe we are just in  
17 one of those short little dry periods during a longer wet  
18 cycle, but we have already had about a century and a half of a  
19 wet cycle and we may be in the very early stages of the next  
20 dry cycle, just under natural variation, holding climate change  
21 aside.

22           Just consider everything that's been built in the last  
23 150 years in South Dakota, almost everything that isn't Indian,  
24 that's the period of time when things were built. We have  
25 assumed a relatively wet period of time to be the natural way

1 things are and always will be. These studies coming out of  
2 North Dakota suggest that's not at all the case. So I leave  
3 that to you, to think about the past and to think about the  
4 future and to think about finding ways to do the best  
5 technology, bring the best technology we can to our resources.  
6 If coal is what we need to burn, let's make sure we burn it in  
7 a near zero emission fashion. Make sure that it doesn't waste  
8 or consume our water resources, that we are not polluting  
9 beyond our boundaries, and that we are providing as a guidance  
10 to both the operators and the communities who are going to  
11 depend on this that we are looking forward in a way that's  
12 going to try to account for some of the things that the best  
13 scientists we have are telling us are coming down the road.

14           So I don't think there's -- I think if there's an  
15 opportunity for this commission to wait at least for the  
16 Environmental Impact Statement to be finalized and to see how  
17 that information fits into your proposals and into your  
18 permitting procedure, I think that's at least what we can do  
19 and making sure that there's provisions and conditions in the  
20 permits that make any new plant ready to meet the  
21 specifications and the regulations that are likely down the  
22 road. So with that I thank you very much for your time and I  
23 will leave this here with the recorder.

24           MR. SMITH: Thank you. Are there other persons who  
25 wish to comment?

1           MR. STEVE NELSON: Hello, my name is Steve Nelson and  
2 I'm a farmer from Letcher, South Dakota. And I am in support  
3 of creating energy because we need to create it. We just can't  
4 not have energy because that's the way of the future. I'd like  
5 to talk about popular opinion first and remember our opinion on  
6 DDT. It was mentioned here about malaria cases dying. The  
7 popular opinion of DDT was it's harmful, it kills people. Now  
8 the World Health Organization just okayed it to spray DDT in  
9 houses. So what has popular opinion done? It's gone the  
10 opposite. So what controls popular opinion? Certainly the  
11 facts don't because the facts were there that said DDT did not  
12 work.

13           So that brings me to the point of nuclear energy.  
14 Nuclear energy, popular opinion was that it is unsafe, there is  
15 lots of waste. In fact there is no waste, and I'd like to  
16 submit to -- get a copy of this and I'll leave one here and we  
17 have got a couple extras, but an article in the 21st Century  
18 I'd like to read right now, it's very short, about nuclear  
19 energy.

20           It's Not Waste: Nuclear Fuel is Renewable. The first  
21 thing to know about nuclear waste is that it isn't waste at  
22 all, but a renewable resource that can be reprocessed into new  
23 nuclear fuel and valuable isotopes. The chief reason it is  
24 called waste is that the antitechnology lobby doesn't want the  
25 public to know about this renewability. Turning spent fuel

1 into a threatening and insoluble problem, the antinuclear  
2 faction figured, would make the spread of nuclear energy  
3 impossible. And without nuclear energy, the world would not  
4 industrialize, and the world population would not grow. Just  
5 what the Malthusians want.

6 The truth is that when we entered the nuclear age, the  
7 great promise of nuclear energy was its renewability, making it  
8 an inexpensive and efficient way to produce electricity. It  
9 was assumed that the nations making use of nuclear energy would  
10 reprocess their spent fuel, completing the nuclear fuel cycle  
11 by renewing the original enriched uranium fuel for reuse, after  
12 it was burned in a reactor.

13 When other modern fuel sources, wood, coal, as this  
14 hearing is about, oil, gas are burned, there is nothing left  
15 except some ashes and air-borne pollutant by-products, which  
16 nuclear energy does not produce. But spent nuclear fuel still  
17 has from 95 percent to 99 percent of its unused uranium in it.  
18 So after we call it waste, there's still 95 percent of the  
19 energy in that uranium that we can reprocess, so that's what  
20 they are talking about, renewable resources in nuclear energy.

21 This means that if the United States buries its 70,000  
22 metric tons of spent nuclear fuel, we would be wasting 66  
23 million (sic) metric tons of uranium-238, which would be  
24 used -- which could be used to make new fuel. In addition, we  
25 would be wasting about 1200 metric tons of fissile uranium-235



1 and plutonium-239. Because of the high energy density in the  
2 nucleus, this relatively small amount of fuel, it would fit in  
3 one small house, is equivalent in energy to about 20 percent of  
4 the U.S. oil reserves.

5           Ninety-six percent of the spent fuel can be turned  
6 into new fuel. The four percent of the so-called waste that  
7 remains, the 2500 metric tons, consists of highly radioactive  
8 materials, but these are also usable. There are about 80 tons  
9 each of cesium-137 and strontium-90 that could be separated out  
10 for use in medical applications, such as sterilization of  
11 medical supplies. Using isotope separation techniques and fast  
12 neutron bombardment for transmutation, technologies that the  
13 United States pioneered but now refuses to develop, we could  
14 separate out all sorts of isotopes, like americium, which is  
15 used in smoke detectors, or isotopes used in medical testing  
16 and treatment.

17           Right now the United States must import 90 percent of  
18 its medical isotopes, used in 40,000 medical procedures daily.  
19 These nuclear isotopes could be mined from the so-called waste  
20 that we have in the United States now. Instead the United  
21 States supplies other countries with highly enriched uranium so  
22 that those countries can process it and sell the medical  
23 isotopes back to us. In other words, there are other countries  
24 in China and Europe that are reprocessing this nuclear waste,  
25 but the United States did not want to go forward in doing that

1 because they knew it would be a cheap source of energy.

2           How fuel becomes spent. The fuel in the nuclear  
3 reactor stays there for several years until the concentration  
4 of the fissile uranium-235 in the fuel is less than about one  
5 percent at each point. I won't quiz you on these numbers but I  
6 just wanted to get a sense of how it's used, spent. A 1,000  
7 megawatt nuclear plant replaces about a third of its fuel  
8 assemblies every 18 months. Initially the fuel spent is very  
9 hot and is stored in pools of water which cool it and provide  
10 radiation shielding. After one year in the water, the total  
11 reactivity level is about 12 percent of what it was when it  
12 first came out of the reactor. And after five years it is down  
13 to just five percent.

14           Unlike other poisons, radioactive isotopes become  
15 harmless with time. This decay process is measured in terms of  
16 half-life, which refers to the amount of time it takes for the  
17 half of the mass to decay. Although a few radioisotopes have  
18 half-lives on the order of thousands of years, most of the  
19 hazardous components of nuclear waste decay to a  
20 radioactivity -- radioactive toxicity level lower than that of  
21 natural uranium ore within a few hundred years.

22           The spent fuel includes uranium and plutonium, plus  
23 all the fission products that have built up in its operation,  
24 and very small amounts of transuranic elements, those heavier  
25 than uranium, or actinides, which have very long decay times.

1 If this spent fuel is not reprocessed, it takes hundreds of  
2 thousands of years for its toxicity to fall below that of  
3 natural uranium.

4           What are we really wasting? The spent fuel produced  
5 by a single 1,000 megawatt nuclear plant over its 40-year  
6 lifetime is equal to the energy in 130 million barrels of oil  
7 or 37 million tons of coal, plus strategic metals and other  
8 valuable isotopes that could be retrieved from the high level  
9 waste.

10           Why don't we reprocess? The United States, which  
11 pioneered reprocessing, put reprocessing on hold during the  
12 Ford administration and shut down the capability during the  
13 Carter administration, because of fears of proliferation. This  
14 left reprocessing to Canada, France, Great Britain and Russia,  
15 plus the countries they service, including Japan, which is now  
16 developing its own reprocessing capabilities. In addition, new  
17 methods of isotope separation using lasers, such as the AVLIS  
18 program at Lawrence Livermore National Laboratory, were shut  
19 down or starved to death by budget cuts.

20           As a result, today we have 40,000 plus metric tons of  
21 spent fuel safely stored at U.S. nuclear plants, which the  
22 antinuclear fear-mongers rail about, even though they are the  
23 ones who created the problem because we weren't able to  
24 reprocess these. The plan to permanently store the spent fuel  
25 at the Yucca Mountain repository in Nevada has become bogged

1 down in what looks like a permanent political battle.

2 Technologically speaking, we can safely store nuclear  
3 waste in a repository like that of Yucca Mountain. But why  
4 should we spend billions of dollars to bury what is actually  
5 billions of dollars worth of nuclear fuel, which could be  
6 supplying electricity in the years to come?

7 The commercial reprocessing plant in Barnwell, South  
8 Carolina shut down in 1977, but we could start reprocessing at  
9 the national nuclear facilities at Hanford in Washington state  
10 and at Savannah River in South Carolina and we would -- we  
11 could have a crash program to develop more advanced  
12 technologies for reprocessing.

13 This article was written by Marjorie Hecht and in here  
14 there's a chart that says -- that is about the estimated  
15 electrical energy from the different fuels that we do use to  
16 get electricity from, the world does. Hardwood, this is how  
17 much -- one kilogram of these fuels will produce these many  
18 kilowatts. Hardwood, one kilogram of hardwood will produce one  
19 kilowatt hour. Coal, three kilograms of coal will produce --  
20 excuse me, one kilogram of coal will produce three kilowatt  
21 hours. One kilogram of heavy oil will produce four kilowatt  
22 hours. One kilogram of natural gas will generate six kilowatt  
23 hours. Now, these are very small numbers, one, three, four and  
24 six. And these are the heavy ones that we use in the United  
25 States.

1 MR. SMITH: Mr. Nelson, say, I'm going to have -- we  
2 are at the end of our allotted time here. I think what I'm  
3 going to have to ask you to do, could you do this, would you  
4 please bring it to a conclusion and what I would suggest is you  
5 could provide us a citation to the article that you are  
6 referencing, and again I apologize, but our hearing was  
7 scheduled from 7:00 to 9:00 and we are past that. Thank you.

8 MR. STEVE NELSON: One more minute, please. Natural  
9 uranium, 50,000 kilowatts per kilogram versus the one, two,  
10 three in coal. Low-enriched uranium, 250,000 kilowatts.  
11 Uranium with reprocessing, if we did real reprocessing and used  
12 up all the waste, 3,500,000 kilowatts per kilogram. You know  
13 how much a kilogram is, it's a few pounds, three million, and  
14 we are messing around with coal that's three, not three million  
15 per kilogram.

16 And all these other countries are using nuclear.  
17 There's nothing wrong with different sources of fuel and  
18 energy, but let's face the facts, we need to produce a lot of  
19 energy very cheaply to where we don't need to meter it because  
20 it costs too much to meter it. Let's just provide it free to  
21 the public and you get it back in other things. But nuclear  
22 energy is the way of the future and in this book also there is  
23 an article that has a plan for 6,000 of these 1,000 megawatt  
24 plants to be put up in the world. Let's worry about the world  
25 and not just South Dakota.

1           Thank you very much for having this public hearing. I  
2 appreciate it very much.

3           MR. SMITH: Thank you, Mr. Nelson. If you wan to  
4 leave either the magazine or a cite to it and then we will have  
5 it for the record. Or you can submit -- I'm trying to think of  
6 the comment period ends tomorrow, you know, but if you want to  
7 get us a copy.

8           CHAIRMAN SAHR: If he has an extra copy.

9           MR. STEVE NELSON: I have an extra copy.

10          MR. SMITH: I think it appears that everybody out in  
11 the audience, other than the people who have been here for the  
12 last week, have testified. I'm assuming that no one who has  
13 been here for days and days probably wants to say anything.  
14 Mr. Rolfes, did you want to say anything?

15          MR. MARK ROLFES: I have nothing.

16          MR. SMITH: I think that was a joke, actually. What  
17 I'd like to do on behalf of the commission is -- is that your  
18 son? Does he want to give a speech? I'd like to thank  
19 everyone for coming, I really would, on behalf of the  
20 commissioners. I know they really appreciate hearing what  
21 y'all think out there, and again we have got a very tough  
22 decision to make, the commissioners do, I don't get to make it.  
23 I gotta point out one thing, and again, it's a constraint that  
24 you may or may not be aware of under our law. Our siting law,  
25 the statute requires us to render a decision within one year,

1 and that may or may not have been a wise choice that the  
2 legislature made, but it is the one they made, so we have got  
3 to live within that and I just want you and all the people on  
4 the Internet to know that it's not the commissioners' decision  
5 here to rush this decision, it's what they have been commanded  
6 to do by the elected representatives of this state. So we have  
7 got to live within that. Thank you.

8 COMMISSIONER HANSON: You might wish to tell them when  
9 that year is up.

10 MR. SMITH: The year is up, we are legally required to  
11 render a decision on or before July 21st of this year and so  
12 it's a tough timetable, it really is. And it's unfortunate  
13 that the federal EIS process can't be coordinated a little  
14 better with our decision making process. The fact is, though,  
15 we have got to live within the reality that we have. And  
16 that's what it is.

17 CHAIRMAN SAHR: There's a question in the back of the  
18 room.

19 MS. JEANNE KOSTER: I have a suggestion. You can turn  
20 them down and invite them to come back with another  
21 application. I mean, the application now is full of some of  
22 the same kind of holes that the EIS is, the draft EIS is. If  
23 you turn them down and invite them to come back with, you know,  
24 a more complete application, that covers all the bases, can you  
25 do that? You probably can't say that now, but please consider

1 it, because we want this done right. Everybody does. The  
2 co-owners of the project want it done right, too. They were  
3 maybe in too much of a hurry. Just consider it.

4 MR. SMITH: Thank you, Ms. Koster, and I think the  
5 commissioners are aware of that, although they are bound by the  
6 Administrative Procedures Act and by the South Dakota Law of  
7 Evidence and our statute, and if they determine that that's the  
8 right choice to make on the record that we have, that's their  
9 decision to make and I think they are aware of that potential,  
10 and thank you. I'm going to adjourn the hearing and I want to  
11 thank you all for coming.

12 (Whereupon, the proceedings were concluded at 9:10  
13 p.m.)

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STATE OF SOUTH DAKOTA     )  
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COUNTY OF HUGHES            )

I, Carla A. Bachand, RMR, CRR, Freelance Court Reporter for the State of South Dakota, residing in Pierre, South Dakota, do hereby certify:

That I was duly authorized to and did report the testimony and evidence in the above-entitled cause;

I further certify that the foregoing pages of this transcript represents a true and accurate transcription of my stenotype notes.

IN WITNESS WHEREOF, I have hereunto set my hand on this the 3rd day of July 2006.

  
\_\_\_\_\_

Carla A. Bachand, RMR, CRR  
Freelance Court Reporter  
Notary Public, State of South Dakota  
Residing in Pierre, South Dakota.

My commission expires: June 10, 2012.