

THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF SOUTH DAKOTA

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IN THE MATTER OF THE APPLICATION BY
OTTER TAIL POWER COMPANY ON BEHALF OF
BIG STONE II CO-OWNERS FOR AN ENERGY EL05-022
CONVERSION FACILITY PERMIT FOR THE
CONSTRUCTION OF THE BIG STONE II PROJECT

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Transcript of Proceedings
Volume 1
June 26, 2006

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COMMISSION STAFF

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KAREN CREMER
GREG RISLOV

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UTILITIES COMMISSION**

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1 MONDAY, JUNE 26, 2006

2 CHAIRMAN SAHR: Good morning. We will begin the
3 hearing in Docket EL05-022 in the matter of the application by
4 Otter Tail Power Company on behalf of Big Stone II co-owners
5 for an energy conversion facility permit for the construction
6 of the Big Stone II project.

7 The time is approximately 9:30 a.m., the date is June
8 26th, 2006, and the location of the hearing is in Room 412,
9 State Capitol, Pierre, South Dakota.

10 I am Robert Sahr, commission chairman. Commissioners
11 Dusty Johnson and Gary Hanson are also present. I am presiding
12 over this hearing.

13 This hearing was noticed pursuant to the commission's
14 second scheduling and procedural order issued March 31, 2006
15 and the third scheduling and procedural order issued May 19th,
16 2006 in conjunction with the commission's notice of public
17 hearing issued August 11th, 2005. Otter Tail must show that
18 the proposed energy conversion facility will comply with all
19 applicable laws and rules, that the energy conversion facility
20 will not pose a threat of serious injury to the environment nor
21 to the social and economic condition of inhabitants or expected
22 inhabitants in the siting area. The energy conversion facility
23 will not substantially impair the health, safety or welfare of
24 the inhabitants and the energy conversion facility will not
25 unduly interfere with the orderly development of the region

1 with due consideration having been given to the views of the
2 governing bodies of affected local units of government.

3 The commission will decide whether the permit should
4 be granted, denied or granted upon such terms, conditions or
5 modifications of the construction, operation or maintenance as
6 the commission finds appropriate.

7 All parties have the right to be present and to be
8 represented by an attorney. All persons testifying will be
9 sworn in and subject to cross-examination by the parties. The
10 commission's final decision may be appealed by the parties to
11 the state circuit court and state Supreme Court. John Smith,
12 the commission's counsel, will act as hearing examiner and will
13 conduct the hearing subject to the commission's oversight. He
14 may provide recommended rulings on procedural and evidentiary
15 matters. The commission may overrule its counsel's preliminary
16 rulings throughout the hearing. If not overruled, the
17 preliminary rulings will become final rulings.

18 At this time I will turn the hearing over to Mr.
19 Smith.

20 MR. SMITH: Thank you, Mr. Chairman. Good morning,
21 everyone. As a preliminary matter, I'd like to remind everyone
22 that's in the audience or here today to please sign the sign-in
23 sheet that we have over at the door, if you haven't done so.
24 With that, we will begin by taking the appearances of the
25 parties. Counsel for the parties represented by counsel and

1 pro se parties themselves.

2 MR. WELK: Tom Welk and Chris Madsen from the firm of
3 Boyce, Greenfield, Pashby and Welk representing the applicants.

4 MR. GUERRERO: Todd Guerrero with the law firm of
5 Lindquist and Vennum, also representing the applicants.

6 MR. SASSEVILLE: David Sasseville with the law firm of
7 Lindquist and Vennum representing the coapplicants.

8 MR. SMITH: Please note, too, you have to push the
9 button on your mike when you talk.

10 MS. STUEVE: Mary Jo Stueve, pro se.

11 MR. DAVIDSON: John Davidson for the intervenors,
12 State Bar of South Dakota, with my counsel from Minnesota.

13 MR. O'NEILL: Michael O'Neill, one of the attorneys
14 representing the joint intervenors.

15 MS. GOODPASTER: Beth Goodpaster, representing joint
16 intervenors.

17 MS. CREMER: Karen Cremer with staff.

18 MR. SMITH: Before we go to the applicant's
19 case-in-chief, are there any preliminary matters that we need
20 to address, motions, witness issues and the like that we should
21 address before you begin your direct case?

22 MR. WELK: Mr. Smith, we have a number of exhibits
23 that we would move in by stipulation and we would have also a
24 number of exhibits that are in the commission file, and I don't
25 know whether you want me to do that after opening statement or

1 do it now.

2 MR. SMITH: Either way you want do it. You can do it
3 any way you want.

4 MR. WELK: I prefer to do it after opening statement.

5 MR. SMITH: Are there any other issues, any motions or
6 anything like that that the parties wish to make before we
7 begin? Mr. Welk, please proceed with your direct case.

8 MR. WELK: Thank you, commissioners. Thank you for
9 the opportunity for the applicant companies to present their
10 evidence to support the application for the permit that we are
11 requesting to construct Big Stone II. The companies that exist
12 for this -- go ahead, next slide -- the applicants consist of
13 seven different companies and their mix is important for you to
14 understand, that there are two that are rate regulated, Otter
15 Tail Power Company, and Montana Dakota Utilities. The
16 remaining five companies are various municipal utilities and
17 also a cooperative, so this is an opportunity for you to see
18 energy companies working together as a consortium and the
19 unique synergy of these different types of structures of
20 companies coming together to construct a single project.

21 The other companies besides Otter Tail and MDU are
22 Great River Energy, Missouri River Energy Services, Heartland
23 Consumer Power District, Southern Minnesota Municipal Power
24 Agency, and the Central Minnesota Municipal Power Agency. You
25 will sometimes hear the acronym SMMPA, that refers to Southern

1 Minnesota Municipal Power Agency, or CMMPA, Central Minnesota
2 Municipal Power Agency. MRES is also an acronym you will here
3 for Missouri River and you are familiar with MDU and the
4 Heartland.

5 As we move through the rest of the proceedings, we
6 will, like most PUC hearings, have to resort to acronyms to
7 describe the companies. I wanted to give you just sort of a
8 heads up of where we are going with this proceeding. The
9 applicant has filed 31 testimonies by 31 separate persons, some
10 of whom filed direct, some rebuttal. I have displayed before
11 you a PowerPoint slide that depicts what we know today to be
12 the tentative order and tentative list of witnesses that are
13 testifying, with the addition of a couple of others on my other
14 slide.

15 These are intended to be 20 live witnesses that will
16 testify before you. As you can see, we will begin with Mr.
17 Uggerud with -- that's Otter Tail Power. Mr. Rolfes, the
18 project manager, Mr. Graumann, who is the environmental
19 manager, Ray Wahle from MRES, Mike McDowell from Heartland,
20 Stephen Thompson from CMMPA, and I'm going to really try to
21 pronounce these last names but I apologize in advance to some
22 of the surnames, John Knofczynski, John Lee, Andrew Skoglund,
23 Randy Stuefen, Peter Koegel from MAPP, you are familiar with
24 the MAPP organization. He will talk about the capacity issues.

25 Jeffrey Grieg from Burns & McDonnell, which is an

1 engineering firm, Bryan Morlock from Otter Tail, Gerald Tielke
2 from -- Tielke from MRES, Stan Selander from Great River, Hoa
3 Nguyen from MDU, Larry Anderson, Robert Davis from CMMPA,
4 Robert Brautovich from the Burlington Northern Santa Fe. There
5 were some issues that were raised through the course of
6 discovery about coal deliveries from the Burlington and we will
7 have a witness that will address those. Actually from the
8 railroad. And then two experts, consultants, Mr. Hewson and
9 Mr. Daniel Klein. That is the tentative order. That's subject
10 to some scheduling matters, but that is what we have told
11 people about.

12 Now, through the course of the discovery, and I would
13 commend all of the parties for their cooperation, this has been
14 a lot of work for everybody regardless of what your interest in
15 the proceeding is. And counsel have worked together to try to
16 identify people who have filed prefiled testimony and who
17 counsel will not have questions for cross-examination. I had
18 asked all counsel in good faith to determine whether they would
19 have any questions. This is obviously a lot of time and money
20 being spent by everybody, but if someone was going to come here
21 and just have their testimony authenticated and there was no
22 cross-examination, I asked counsel to represent if they would
23 have no questions. The list that's now being displayed on the
24 PowerPoint are a list of the applicants' nontestifying
25 witnesses, and what we intend to do is we have affidavits or

1 will have affidavits, because this has been basically a
2 progress report from opposing counsel as they look and prepare
3 for the hearing.

4 But witnesses Richard Lancaster of GRE, David
5 Geschwind of SMMPA, Andrea Stomberg of MDU, Daniel Jones from
6 the Barr Engineering and Tina Pint from Barr Engineering, she
7 was the geologist, he was an aquatic engineer, Anne Ketz from
8 Barr and she actually is a consultant on the archaeological
9 issues.

10 The next three witnesses, David Gaige, Stephen
11 Gosoroski and Kiah Harris, are from Burns & McDonnell, and
12 everyone except Mary Jo Stueve was willing to stipulate those
13 and in deference to her, she has some questions, so we are
14 bringing those three individuals so they actually should move
15 to the prior slide. At the time that these slides were
16 prepared, there was representations by the rest of the counsel
17 there would be no cross, but we are going to proceed to bring
18 those witnesses.

19 Dick Edenstrom from First District and Janelle Johnson
20 from Otter Tail, these are all witnesses whose testimony will
21 be in the record and they will be authenticated. I would tell
22 you, however, if the commissioners have any questions after
23 hearing the testimony this week and reading that, if they would
24 like to ask any questions of these witnesses that are
25 nontestifying, they have all been asked to be available by

1 telephone if the commissioners have any questions.

2 It's very difficult to summarize all of the evidence
3 from all of the pages of testimony, but we are going to -- I'm
4 trying to this morning kind of give you a heads up of where we
5 are going regarding our proof. As your general counsel read,
6 the applicant has the burden of proof to demonstrate that we
7 should be granted the permit we are requesting to construct and
8 operate the plant. But first of all we have to show under the
9 applicable regulations and statutes there's a need for the
10 plant. And you are going to hear from the individual companies
11 how each individual company made an individual assessment of
12 their need for resources to generate electricity. And in
13 considering that assessment, they also reviewed the demand side
14 management programs that the companies had to reduce the demand
15 for electricity from their consumers. Also in these
16 assessments these companies also considered renewable sources
17 of energy, and they considered generation sources other than
18 coal, which they eventually selected.

19 And their conclusion uniformly across the board of
20 these seven companies, that in order to provide base load
21 electricity, that's what this case is about, they have selected
22 coal, but in addition to the supercritical pulverized coal
23 plant that we seek to construct, they are also utilizing
24 simultaneously demand-side management programs and the use of
25 other renewables. So this is what the companies looked at in

1 reviewing and determining how to proceed to construct the
2 plant.

3 Now, this application process, as you know, what you
4 saw was an application that was filed approximately a year ago.
5 Prior to filing that application in July of 2005 with the
6 commission, the companies went through a very rigorous analysis
7 of various sites to construct this plant. And you will hear
8 from the witnesses how this analysis took place and how the Big
9 Stone site, which is obviously adjacent to the existing Big
10 Stone I plant, was selected. And you will hear of a lot of
11 reasons why it was selected but in a capsule, the synergies of
12 the existing infrastructure of Big Stone I assisted the
13 companies in selecting the Big Stone II site to be adjacent to
14 Big Stone I.

15 You will also hear a lot of engineering names or
16 companies throughout the process and I wanted to give you sort
17 of a high-level description of what these engineering companies
18 did. First of all, you will hear the analysis from Barr
19 Engineering. Barr was selected to look at the actual site, its
20 topography and some of the environmental concerns. A couple of
21 the witnesses who are not going to testify, Tina Pint, for
22 example, was a geologist. Daniel Jones was an aquatic engineer
23 and their testimony depicts their analysis. We will have John
24 Lee, who was the lead person who drafted that here as well as
25 Andrew Skoglund, who provided some of the analysis regarding

1 noise.

2 There was also another engineering group that you will
3 hear much about, Burns & McDonnell, and their responsibility
4 was to do analysis of the preliminary plant design and some of
5 the issues that affected that. As the commission is well aware
6 of, this process started after the filing of the application.
7 You directed public input hearings to be held, which were held
8 in Milbank, and also there had been an open comment period
9 that's been existing, but also there are parallel hearings that
10 are occurring through the federal EIS process.

11 Those hearings are occurring or have occurred and
12 throughout this process I had Dawn, who is next to me as the
13 paralegal, go through and look at what we have produced in this
14 docket. Just to let you know the magnitude, what our
15 calculation is today is that we have produced over 47,475 pages
16 of documents and we have filed over 2,000 pages of prefiled
17 testimony and exhibits. So as you can see, this is a massive
18 undertaking and I believe that by the absence of having any
19 motions that were heard before you regarding motions to compel,
20 we have tried through this process to provide the intervenors
21 what information they want. Sometimes it might not have been
22 as timely as they want, but we have tried to not hide the ball,
23 so to speak, and to answer the questions.

24 So you can see by the volume of what we have produced
25 in this docket it's been a Herculean task and I want to commend

1 counsel and their staff and everybody for trying to work
2 together so we could get to this hearing.

3 One of the things we are very proud of as the
4 applicants are addressing what the environmental concerns and
5 benefits might be. We actually think these are benefits of the
6 selection of the site and the operation of the plant. One of
7 the things that the applicants have agreed to do through the
8 process, one of the things we have done is increased the size
9 of the transmission line to accommodate potential generation
10 sources, including wind. The applicant companies have agreed
11 to install a wet scrubber that will reduce emissions for
12 sulphur dioxide for both Big Stone I and II, in other words,
13 the site itself. Big Stone II is going to have a boiler that
14 will produce low levels of nitrogen oxides and will install an
15 emission control technology that will also further reduce these
16 emittents.

17 One of the issues you're going to hear about is
18 mercury. We have known that that is an issue since the
19 beginning in this case. And the applicant companies have
20 addressed it and have I believe come and have now made a legal
21 commitment that the plant, Big Stone I, as you know, has a 450
22 megawatt capacity. This plant is a 600 megawatt plant that's
23 proposed. So this plant will more than double the existing
24 generation and the companies have now committed that there will
25 be no more increase in the mercury emissions. The owners have

1 committed to a voluntary cap of 189 pounds of mercury per year
2 after three years of commercial operations.

3 In other words, at that period of time, the companies
4 are committing that there will be no more emissions from the
5 site from both plants than exist today. I think as much as
6 what this proceeding before you is about is what this
7 proceeding is not about. We're going to hear testimony, we're
8 going to hear issues that understandably should be raised and
9 should be considered. However, some of these issues are not
10 intended to take away from what your general counsel said were
11 the requirements in seeking this energy conversion siting
12 permit.

13 First of all, this is not a proceeding on which we are
14 trying to discern the difference between wind versus coal as a
15 resource and make a selection. That's not what this proceeding
16 is about. This is a proceeding to obtain a permit to construct
17 a plant. This is also a proceeding that only involves a
18 consideration of base load generation for electricity. This is
19 not about siting an intermediate or a peaking plant, but rather
20 a base load plant and as this commission knows, there hasn't
21 been a base load plant built in this area for over 30 years.
22 This is also a hearing not in which we're going to divine and
23 determine the science of and the solution to global warming.
24 That issue exists in some of the proceedings and in the
25 testimony, but this is not the forum, frankly, to solve and to

1 explore the science of global warming.

2 Also there's an issue that's been raised in the
3 testimony about carbon dioxide regulation. As you know, there
4 is no current regulations in the state of South Dakota or on
5 the federal level regulating carbon dioxide emissions. There
6 is a lot of testimony in there speculating about future
7 regulation but at the end of the day, this commission is not
8 going to be divining what carbon dioxide regulation is going to
9 be. That's not part of your requirement and that would be pure
10 speculation because that doesn't exist on a federal or state
11 level today.

12 Another issue that I'd like you to think about as we
13 proceed this week and that is the consequences if the plant is
14 not built. Scrubbing through all the information and that, our
15 position is if this plant is not built, that consumers will
16 have a more expensive and a less reliable supply of
17 electricity. That we believe is the consequence of not
18 building the plant, based upon the evidence that you will
19 receive.

20 Through the process as outlined in the statutes and
21 the regulations, the process of the federal government and the
22 federal EIS and your statutes regarding a local review
23 committee were undertaken and there were a number of
24 recommendations that were proposed by the local review
25 committee, which the report is in the record. I'm not going to

1 detail those in a PowerPoint, but I want to tell you generally
2 what we have agreed to.

3 We have agreed to adopt all of the local review
4 committee recommendations. We have also agreed to accept the
5 recommendations in the draft EIS and some of those include,
6 this isn't intended to be an exhaustive list, but through the
7 testimony and the committee report, I just want to let you know
8 what the applicants have agreed to do. We have agreed to
9 prepare a housing contingency plan, to finance an additional
10 officer for the Grant County sheriff's office, to adopt and
11 implement a drug and alcohol screening protocol for the Big
12 Stone II unit employees, to acquire the necessary fire
13 protection equipment and train the local fire department. We
14 have also agreed to appoint a local public relations
15 representative to facilitate the exchange of information
16 between the applicants and the local communities.

17 Insofar as the draft EIS, and these recommendations
18 are contained throughout the report, they're not in a neat
19 place that you can pick up, but one of the recommendations was
20 regarding vegetation, that we implement an integrated weed
21 control plan prior to construction, which we have agreed to do.

22 Insofar as the issue of transportation set forth in
23 the draft EIS, we have agreed to coordinate with the county
24 authorities to mitigate severe road damage. We have agreed to
25 organize bus transportation or car pooling to reduce congestion

1 for traffic. We have agreed that the delivery of heavy
2 equipment should be in a manner to reduce traffic congestion
3 and unsafe driving conditions.

4 In regard to public safety, we have agreed to the
5 establishment of a work safety program, to secure after-hours
6 access to construction areas, and the notification of the
7 public about high-risk operations.

8 In relationship to noise, we have agreed to work with
9 local residents to develop noise mitigation measures in case
10 there are noise complaints.

11 In summary, what does this project provide, if you
12 would approve the application? It provides a stable, secure
13 source of base load electricity for more than a million
14 consumers. It provides the construction and operation of an
15 environmentally responsible plant. It anticipates an
16 investment in over \$1 billion in the plant. And it provides
17 millions of dollars of economic benefits in the construction
18 and operation of the plant. And we believe, commissioners, and
19 I'll ask at the end of the hearing that you approve the
20 commission -- or approve the issuance of the permit to
21 construct and operate Big Stone II plant. Thank you.

22 MR. SMITH: Do the other parties want to make your
23 opening statements now in response to Mr. Welk or would you
24 rather reserve that prior to your direct case?

25 MR. O'NEILL: On behalf of the joint intervenors, we

1 would like to reserve our opening statement.

2 MS. CREMER: Staff intends to reserve their opening
3 statement.

4 MR. SMITH: Ms. Stueve?

5 MS. STUEVE: Mary Jo intends to reserve.

6 MR. SMITH: With that, moving along, then, Mr. Welk,
7 please proceed with your case.

8 MR. WELK: At this time I'm going to go through the
9 laborious task of moving for the admission of certain exhibits,
10 some of which have been premarked and these would be the
11 exhibits of the testimony of the people that will not testify.

12 And then for the benefit of the commission as general
13 counsel, we went through your docket and there's a lot of
14 material that precedes the filing of the prefiled testimony and
15 we have gone through and marked exhibits out of the file, so to
16 speak, and I will be asking the commission to take judicial
17 notice.

18 We have handed out to the commission and to all of the
19 parties your docket sheet with the numbers on it and just
20 before I start, the applicants' exhibits at this point in time
21 consist of Exhibits 1 through 53, we then started with your
22 commission file with Exhibit 54 and then we will go through 54
23 through 90 and we have selected some portions of your file to
24 be marked as exhibits. A lot of the other matters are not
25 necessary to be marked as exhibits. But I'd like to proceed at

1 this time to go to the witness table and to ask that those be
2 stipulated in evidence.

3 MR. SMITH: Please proceed.

4 MR. WELK: First I'd like to start with some of the
5 exhibits of witnesses who have prefiled testimony and then
6 which there is anticipated to be no cross-examination. I would
7 move for the admission of Applicants' Exhibit 2, which is the
8 prefiled direct testimony of Richard Lancaster, Applicants'
9 Exhibits 2-A, 2-B, 2-C, 2-D and 2-E that are appended to Mr.
10 Lancaster's deposition. I'd also move the admission of
11 Applicants' Exhibit 5, which is the prefiled direct testimony
12 of David P. Geschwind. I would move for the admission of
13 Applicants' Exhibit 7, which is the prefiled direct testimony
14 of Andrea Stomberg. I would move for the admission of
15 Applicants' Exhibit 17, which is the prefiled direct testimony
16 of Daniel Jones. I would move for the admission of Applicants'
17 Exhibit 19, the prefiled direct testimony of Tina Pint. I
18 would move for the admission of Applicants' Exhibit 21, which
19 is the prefiled direct testimony of K. Anne Ketz. I would move
20 for the admission of Applicants' Exhibit 27, the prefiled
21 direct testimony of Dick Edenstrom, Applicants' Exhibit 28, the
22 prefiled testimony of Janelle Johnson. That would conclude
23 those, which I believe everyone has uniformly agreed would be
24 stipulated in.

25 Then I will go through the rest of the exhibits.

1 MR. SMITH: Is there an objection to the motion?

2 MR. O'NEILL: No.

3 MS. CREMER: Staff has no objection.

4 MS. STUEVE: No objection.

5 MR. SMITH: I'm not going to reread all the numbers.

6 The exhibit numbers that Mr. Welk has moved into evidence are
7 received.

8 EXHIBITS:

9 (Applicants' Exhibit Nos. 2, 2-A, 2-B, 2-C, 2-D, 2-E,
10 5, 7, 17, 19, 21, 27, and 28 received into evidence.)

11 MR. WELK: The next group of exhibits that come from
12 the commission's file and we have provided all counsel and the
13 commissioners with your docket sheet and we will try to -- I
14 will go through that. Now, some of these you may not see on
15 your docket sheet and the reason is sometimes letters that come
16 into the file do not come with an exhibit number or document
17 number. Those that aren't, I will mark.

18 First of all -- I will ask the commission to take
19 judicial notice of all of the following exhibits as I read them
20 in. Applicants' Exhibit 54, which is the June 20th, 2005
21 letter along with the application for a South Dakota energy
22 conversion facility siting permit. Exhibit 55, which is the
23 commission's order assessing filing fee dated August 18th,
24 2005. Applicants' Exhibit 56, which is the notice of
25 application, order for and notice of public input hearing,

1 notice of opportunity to apply for party status, which is dated
2 August 18th, 2005. Exhibit 57, which is a letter dated August
3 23rd, 2005 from Erin, E-R-I-N, Jordahl Redlin, energy campaign
4 coordinator of clean action, along with petition to intervene
5 of Clean Water Action. Applicants' Exhibit 58, which is a
6 written, handwritten note to Pam Bonrud from Deanne White from
7 the Sierra Club, enclosing an application for party status for
8 the South Dakota chapter of the Sierra Club, and that was dated
9 September 16th, 2005. Applicants' Exhibit 59, which is an
10 application for party status for the union of concerned
11 scientists, dated September 15th, 2005, it also includes --
12 it's a copy of it I guess. Exhibit 60 is a letter from George
13 Smith, executive director of the Grant County Economic
14 Development Corporation to the Public Utilities Commission.
15 Exhibit 61 is an application for party status dated September
16 16th, 2005 by Mary Jo Stueve. Applicants' Exhibit 62 is an
17 application for party status of Minnesotans for an Energy
18 Efficient Economy, the Isaac Walton League of America, Midwest
19 office and the Minnesota Center for Environmental Advocacy that
20 was received by the commission on September 19th, 2005, sent in
21 by counsel, Beth Goodpaster. Exhibit 63 is a letter from Casey
22 Davidson, a letter of representation that he had been retained
23 by the Clean Water Action Alliance of Minnesota. Exhibit 64 is
24 the order granting intervention entered by this commission on
25 October 4, 2005. Exhibit 65 is an order dated October 5, 2005

1 entered by this commission granting local review committee's
2 request to hire consultants. Exhibit 66 is a letter from me
3 containing a motion for prehearing conference dated October 26,
4 2005. Exhibit 67 is a letter from Mr. Davidson withdrawing his
5 representation for Clean Water Action Alliance of Minnesota.
6 Exhibit 68 is the local review committee report. Exhibit 69 is
7 the first scheduling and procedural order entered by the
8 commission, that's dated January 18th, 2006. Applicants'
9 Exhibit 70 is a letter from Erin Jordahl Redlin to the PUC
10 having the Clean Water Action to withdraw. Exhibit 71 is a
11 letter along with a motion to clarify scheduling order and
12 procedural order signed by Mr. Madsen dated February 23, 2006.
13 Exhibit 72 is the original of the transcripts of the telephone
14 conference that was held on March 1st, 2006 regarding this
15 matter. Applicants' Exhibit 73 is the transcript of
16 proceedings of September 13th, 2005 before the commission
17 regarding this proceeding. Applicants' Exhibit 74 is an order
18 granting withdrawal of intervention dated March 16th, 2006,
19 regarding Clean Water Action's request to withdraw.
20 Applicants' Exhibit 75 is the second scheduling procedural
21 order entered by this commission, that's dated March 31st,
22 2006. Applicants' Exhibit 76 is a cover letter along with a
23 joint motion and stipulation to amend second scheduling order
24 and procedural order, that was filed with the commission May
25 22nd, 2006 and dated May 12, 2006. Applicants' Exhibit 77 is a

1 stipulation that was filed by Mr. Madsen between the co-owners
2 and the Sierra Club regarding the Sierra Club's withdrawal, it
3 was dated May 18th, 2006. Applicants' Exhibit 78 is the third
4 scheduling and procedural order entered by this commission
5 dated May 19th, 2006. Applicants' Exhibit 79 is the order
6 granting joint motion and stipulation to amend second
7 scheduling order, procedural order, order granting stipulation
8 withdrawal of intervention, that is dated June 5, 2006.
9 Applicants' Exhibit 80 is a letter from Marie Zellar,
10 Z-E-L-L-A-R, Midwest regional director, Clean Water Action to
11 the PUC, dated June 12th, 2006. Applicants' Exhibit 81 is a
12 motion and a cover letter, it's a motion to take judicial
13 notice with four copies of the draft EIS. Exhibit 82 is the
14 fourth procedural scheduling order entered by this commission
15 on June 22nd, 2006, scheduling the consideration of public
16 comments for Thursday of this week at 7 o'clock p.m. Exhibit
17 83 is the original of the transcript of the prehearing
18 conference held on June 20th, 2006. And Exhibit 84 is the
19 affidavit of Anne Ketz. Applicants' Exhibit 85 is the
20 affidavit of Tina Pint. Affidavit of Daniel Jones is
21 Applicants' Exhibit 86. Applicants' Exhibit 87 is the
22 affidavit of David Geschwind. Applicants' Exhibit 88 is the
23 affidavit of Andrea Stomberg. Applicants' Exhibit 89 is the
24 affidavit of Dick Edenstrom. Applicants' Exhibit 90 is the
25 affidavit of Janelle Johnson. All of those affidavits 84

1 through 90 relate to the exhibits that have now been received.
2 Based on that identification, I would ask the commission to
3 take judicial notice of all those exhibits 54 through 90.

4 MR. SMITH: Do any of the parties have an objection?

5 MR. O'NEILL: On behalf of the joint intervenors, no
6 objection.

7 MR. SMITH: Ms. Stueve?

8 MS. STUEVE: No objection.

9 MS. CREMER: The staff has no objection.

10 MR. SMITH: All of the forementioned exhibits are
11 received.

12 EXHIBITS:

13 (Applicants' Exhibit Nos. 54 through 90 received into
14 evidence.)

15 MR. SMITH: Exhibits 54 through 90; is that correct?

16 MR. WELK: That's correct. We will call our first
17 witness.

18 MR. SASSEVILLE: Thank you, Mr. Smith. The Big Stone
19 applicants call Ward Uggerud.

20 Thereupon,

21 WARD UGGERUD,

22 called as a witness, being first duly sworn as hereinafter
23 certified, testified as follows:

24 DIRECT EXAMINATION

25 BY MR. SASSEVILLE:

1 Q. Please state your full name for the record, Mr.
2 Uggerud.

3 A. My name is Ward Lee Uggerud.

4 Q. By whom are you employed, Mr. Uggerud?

5 A. Otter Tail Power Company.

6 Q. What's your position with Otter Tail Power?

7 A. I am senior vice-president for the company.

8 Q. Mr. Uggerud, did you prepare or cause to be prepared
9 prefiled written testimony in this proceeding?

10 A. I did.

11 Q. You should have in front of you premarked Applicants'
12 Exhibits 1 and 29. Could you take a look at those and identify
13 those for the record? One and 29, Chris.

14 A. Exhibit 1 is my prefiled direct testimony.

15 Q. And could you identify for the record Applicants'
16 Exhibit 29, Mr. Uggerud?

17 A. Exhibit 29 is my prefiled rebuttal testimony.

18 Q. And it's your testimony that you prepared yourself or
19 caused to be prepared both Exhibits 1 and 29?

20 A. Yes, that is correct.

21 Q. Are the responses to the questions set forth in
22 Applicants' Exhibits 1 and 29 true and correct to the best of
23 your knowledge?

24 A. Yes, they are.

25 Q. Are there any errors or mistakes in either one of

1 these exhibits that require correction on the record?

2 A. There are not.

3 Q. Mr. Uggerud, if I were to ask you each of the
4 questions contained in Applicants' Exhibits 1 and 29 orally on
5 the record this morning, would your answers be the same?

6 A. Yes, they would.

7 MR. SASSEVILLE: Applicants move for admission into
8 the record Applicants' Exhibits 1 and 29.

9 MR. SMITH: Are there objections?

10 MR. O'NEILL: Joint intervenors have no objections.

11 MS. CREMER: Staff has no objection.

12 MS. STUEVE: Mary Jo has no objection.

13 MR. SMITH: Applicants' Exhibits 1 and 29 are
14 received.

15 EXHIBITS:

16 (Applicants' Exhibit Nos. 1 and 29 received into
17 evidence.)

18 Q. (BY MR. SASSEVILLE) Mr. Uggerud, it's my understanding
19 that the commission will indulge a ten minute or so summary of
20 your prefiled testimony. Would you please present that summary
21 today?

22 A. Yes, I will. Thank you, Mr. Sasseville. Good
23 morning, it is my pleasure to be here this morning. The
24 purpose of my testimony is to provide a short overview both of
25 Otter Tail Power Company and also of the project. First of

1 all, the summary of Otter Tail Power Company. Otter Tail is an
2 investor-owned utility with operations in South Dakota as well
3 as North Dakota and Minnesota. The company serves a service
4 territory of approximately 50,000 square miles. We serve 423
5 communities and it is worth mentioning to the commission that
6 over half of those communities that we serve have a population
7 of less than 200 people. We serve three communities with a
8 population of approximately 10,000. Those are our largest
9 communities and we serve no community with a population of
10 20,000 or greater.

11 Otter Tail is the developing partner for the Big Stone
12 Unit II project and our share of that project would be 116
13 megawatts or approximately 19 percent. It is important to
14 consider the question of why have we selected the Big Stone
15 Unit II project for development. The electricity need of the
16 customers served by the joint applicants is continuing to grow
17 and it is continuing to grow within a relatively important
18 dynamic that is also occurring and that is the historical
19 balance that has existed between generating capacity and load
20 demand is shifting. Where for the past 20 years we have
21 essentially been a region with surplus electricity resources,
22 those surpluses are now being replaced by deficits.

23 We are seeing increases in the price and in the
24 volatility of the price for oil and natural gas. We are seeing
25 that as existing capacity and energy purchases that have been

1 available to the applicants are expiring, that renewing those
2 purchase agreements with other utilities is resulting in
3 decisions that would reflect that those are more costly
4 alternatives than the construction of the Big Stone II plant.

5 Purchasing capacity and associated energy from others
6 is no longer a viable or a cost-effective alternative to the
7 construction of new base load facilities.

8 A little bit more about the Big Stone Unit II project.
9 The project involves ownership by seven regional utilities.
10 Those seven utilities represent a diverse ownership mix.
11 Included in that group are investor-owned electric utilities,
12 cooperative utilities and municipal power utilities. Some of
13 the project participants are regulated by one or more state
14 public utility commissions and others are self-regulated by
15 their members. Each of them, however, serves a predominantly
16 rural service territory and the personal incomes in the service
17 territory of the seven project applicants is less than what one
18 would expect on a national basis.

19 The decisions that I am involved in regarding
20 providing an essential service are deliberately done to provide
21 electricity as reliably and economically as possible to the
22 customers we serve. Each of the project participants was
23 selected for and has retail load in the footprint of the plant.
24 Each of the project participants has independently arrived at
25 the conclusion and the decision to be a part of the project.

1 As a part of the selection process in determining that
2 Big Stone II is the project that will provide electricity as
3 reliably and economically as possible, Otter Tail and each of
4 the applicants have done extensive studies to verify that
5 conclusion and those studies have been system level planning
6 studies that have shown, among other things, that it is not
7 just the construction of Big Stone II that we do to supply
8 electricity to our customers as reliably and economically as
9 possible, but that it is Big Stone II and a combination of
10 other things, such as demand side management, the development
11 of renewable energy resources. That is, it is not Big Stone II
12 instead of, but it is Big Stone II in addition to other things.

13 The studies that we have done show that the region has
14 needs for additional base load capacity that can reliably
15 produce large amounts of low cost energy in the time frame for
16 which we have identified this project.

17 It is worth mentioning that there's also an
18 environmental stewardship that has been on the minds of the
19 project participants. We have developed a Big Stone Unit II
20 project that, within our overall resource plans, is reliable,
21 it is cost effective and it is also environmentally
22 responsible. The project will more than double the electricity
23 output of the Big Stone site, but it will do so with no
24 increase in the emissions of sulphur dioxide, nitrous oxides or
25 mercury.

1 We are also proposing as a part of the project to add
2 additional project transmission lines to increase the transfer
3 capability of the project by approximately 1,000 megawatts
4 beyond that required for the Big Stone II Unit in order that we
5 might facilitate the development of future additional resources
6 that we would anticipate would include renewable resources such
7 as wind.

8 The technology that we have selected for the Big Stone
9 Unit II project is a supercritical pulverized coal technology
10 that provides for the highest energy conversion efficiency
11 possible compared to other existing coal-fired power plants in
12 the region and in the country, and that will result in 18
13 percent less carbon dioxide emissions compared to those other
14 existing plants.

15 We understand the debate on environmental issues and
16 we take our environmental stewardship responsibly and have
17 demonstrated that in the decisions we have made relative to the
18 technology choices for Big Stone II. The Big Stone Unit II
19 project is only a piece of the overall puzzle to address the
20 region's future energy needs. It is not the entire puzzle. My
21 job is to provide electricity as reliably and economically as
22 possible and to do that, Otter Tail and the other project
23 applicants propose to enact demand side management projects,
24 renewable energy resource development projects, and the
25 construction of the Big Stone Unit II project that we are

1 discussing here today.

2 Q. Thank you, Mr. Uggerud. You didn't say much about
3 your experience in the industry. Could you give a two-minute
4 summary of your qualifications and experience?

5 A. Yes, I can. I have been employed by Otter Tail Power
6 Company for 35 years. During the course of my employment with
7 Otter Tail Power Company, I have been involved in the various
8 engineering sides of the company, that includes the development
9 and construction of transmission and substation and protective
10 relaying. I have been involved in our system operations
11 department. I have been involved on the supply side, the
12 environmental engineering is an area of responsibility under
13 me, as is the wholesale marketing of electricity. During the
14 course of my career, I have been involved in the Mid-Continent
15 Area Power Pool and the North American Electric Reliability
16 Council. I have served as chairman of both the MAPP operating
17 committee and the North American Electric Reliability Council
18 operating committee.

19 Q. Does that conclude your summary, Mr. Uggerud?

20 A. Yes, it does.

21 MR. SASSEVILLE: At this time we tender Mr. Uggerud
22 for cross-examination.

23 MR. SMITH: Thank you. In terms of order of
24 cross-examination, my assumption is that the MCEA group would
25 go first, followed by Ms. Stueve and then staff. Is that

1 agreeable?

2 MR. O'NEILL: That's agreeable to the joint
3 intervenors.

4 MS. STUEVE: Yes.

5 MR. SMITH: Staff, is that acceptable?

6 MS. CREMER: Yes, that would be fine.

7 MR. SMITH: With that, Mr. O'Neill, Ms. Goodpaster,
8 please proceed.

9 MR. O'NEILL: Thank you.

10 CROSS-EXAMINATION

11 BY MR. O'NEILL:

12 Q. Good morning, Mr. Uggerud.

13 A. Morning, Mr. O'Neill.

14 Q. In looking through your direct testimony that is
15 contained in Exhibit 1 on page 10, line eight, we noted that
16 one of the statements that was made there is that the Big Stone
17 Unit II was the lowest cost option selected. Do you recall
18 your testimony in that regard?

19 A. Yes, I do.

20 Q. Okay. When we as the intervenors looked at the cost
21 factors of the Big Stone Unit II project as stated in the
22 application for the permit, we did not see any consideration
23 given by the Big Stone II Unit co-owners as it relates to
24 federal CO2 regulatory costs. Is that accurate?

25 A. Would you repeat your statement, please?

1 Q. Sure. I'm looking at the application for the Big
2 Stone Unit II permit and I'm wondering if anywhere in there
3 there was any discussion regarding the federal CO2 regulatory
4 costs that you anticipated with this project.

5 A. Well, when I made the statement on page 10 of my
6 testimony that this was the lowest cost project that we had
7 identified, that was the decision that was made in
8 consideration of the state and federal requirements for the
9 examination of environmental issues such as CO2. So to the
10 extent that you raise the assertion, I think that I would
11 disagree with the characterization because it is my opinion
12 that we had considered those things in the selection of the Big
13 Stone Unit II project.

14 Q. When you applied for this Big Stone Unit II project,
15 what federal regulatory costs did you assume were going to be
16 something that you would have to pay or something that you
17 would have to have as a cost on the part of your project, then?

18 MR. SASSEVILLE: I will object to the form of the
19 question. I think it's vague. If he understands it, he can
20 answer.

21 MR. SMITH: Do you understand the question?

22 A. I understand the question. And we did not make any
23 assumptions with regard to future and unknown quantification of
24 those issues. We are aware of the requirements as they exist
25 today and those have been considered in the decision that we

1 present before you today.

2 Q. (BY MR. O'NEILL) So when you say that there was no
3 known quantification of the cost, do you feel that the future
4 federal regulation on CO2 is too speculative to quantify at
5 this time?

6 MR. SASSEVILLE: I'll object. He referred to the
7 cost, and I'm not sure what costs you are referring to,
8 counsel.

9 MR. O'NEILL: CO2 regulatory costs, federal CO2
10 regulatory costs.

11 MR. SASSEVILLE: Thank you.

12 A. I think there is evidence that we have submitted for
13 the record that does show in fact the degree to which we have
14 quantified CO2 costs as a part of our decision making process.
15 We have referred in our testimony to the consideration that we
16 have given for the statutory requirements that are upon us with
17 regard to the State of Minnesota and we have also engaged, and
18 I think that it's in the testimony, analysis by Burns &
19 McDonnell, to consider what the effect would be of considering
20 additional CO2 carbon mitigation than what was included in the
21 State of Minnesota. So I would suggest that we have in fact
22 gone to considerable length to consider the possible effects of
23 various carbon mitigation scenarios.

24 Q. (BY MR. O'NEILL) Is the Minnesota statute that you
25 are referring to, is that the externality statute?

1 A. Yes, it is.

2 Q. Now, do you distinguish between externalities and CO2
3 regulatory costs?

4 A. It is my opinion that they are -- that they are
5 similar.

6 Q. What is your definition of externalities, if you have
7 one, or if someone else has one, just refer me to that. I'm
8 looking for the Big Stone Unit II co-owners' understanding of
9 externalities as it relates to -- the definition of
10 externalities as it relates to this issue of CO2.

11 A. Well, certainly --

12 MR. SASSEVILLE: Excuse me, I'll object based on
13 foundation. He's here on behalf of Otter Tail and the project,
14 but your assumption is that what he has to say applies for all
15 of the co-owners and the project, so I'll object based on lack
16 of foundation.

17 MR. O'NEILL: Well, I'll limit it to Otter Tail Power
18 and whoever you are speaking on behalf of, then. You can state
19 that. I didn't mean to broaden your testimony any more than
20 necessary.

21 A. Well, I think that the question that you asked was
22 what was my definition of environmental externalities.

23 Q. (BY MR. O'NEILL) Correct.

24 A. And I would offer for the record that the definition
25 of environmental externalities is that which we can determine

1 from Minnesota statute where there is fairly explicit
2 discussion with regard to the manner in which utilities would
3 consider those things.

4 Q. And would you agree with me if my definition of
5 environmental externalities is where someone else pays for the
6 costs besides the Big Stone Unit II co-owners? In other words,
7 it's an externality, it's a cost not borne in the project, but
8 it's a cost that economically we have to consider because of
9 the project.

10 A. And I think that that in fact is how it is referred to
11 in Minnesota statute.

12 Q. So then back to the issue of did the Big Stone Unit II
13 co-owners consider regulatory costs, federal regulatory costs
14 in its application permit. Isn't it true, then, that there
15 isn't actually a number that you put on the project that you
16 attributed to CO2 federal regulatory costs, what you are
17 testifying is that you put a number on the externalities as
18 Minnesota has done through its statutory process?

19 MR. SASSEVILLE: I'll object, lack of foundation.
20 It's also vague. You refer to federal regulatory costs or
21 proposals. Could you be more specific?

22 MR. O'NEILL: Federal legislation.

23 MR. SASSEVILLE: There's -- as you know, counsel,
24 there's been lots of proposed federal legislation, so do you
25 want him to answer with respect to each one over the long

1 period of time?

2 MR. O'NEILL: No, my question was federal regulatory
3 costs, federal legislation, and I understand that there's a
4 number of bills. But my question to you is, taking one of the
5 bills, taking a group of the bills, taking all of the bills,
6 did Otter Tail Power and/or the Big Stone Unit II co-owners
7 consider the regulatory costs that would arise out of any one
8 of those sets of federal legislation in providing the estimate
9 for the cost of this project?

10 MR. SASSEVILLE: I'll object, again, lack of
11 foundation and it calls for speculation.

12 MR. SMITH: Overruled, if you can answer.

13 A. Well, we have attempted to. We did, as I had
14 indicated in my previous answer, engage Burns & McDonnell to
15 take a look at what the cost impacts would be of scenarios that
16 included analysis other than that as per the Minnesota
17 environmental externalities and that is a part of the record.
18 There is, to my belief, no quantified federal number. There
19 are more than one federal bills that have been considered and
20 debated, but I am not aware that there was anything that we
21 could take from those bills and apply directly in terms of a
22 CO2 number.

23 Q. (BY MR. O'NEILL) Okay. In my review of the Burns &
24 McDonnell testimony that has been filed in this case, it was
25 witness Jeffrey Grieg, and I believe that he had referenced a

1 generation alternative study and what his testimony referenced
2 was that there was a carbon tax of 3.64 per ton. Are you
3 familiar with that testimony?

4 A. I'm familiar with Mr. Grieg's --

5 MR. SASSEVILLE: I wanted to object. You referred to
6 a carbon tax and I think that may be different than what the
7 Minnesota statute calls for.

8 Q. (BY MR. O'NEILL) Yeah, and I just wanted to get clear
9 if there is something else that he is referring to with the
10 Burns & McDonnell witness and so that's my follow-up question
11 to you. We believe that that is different than what we are
12 asking about here today on a federal regulatory costs. We do
13 not understand that Mr. Grieg through his generation
14 alternative study developed a CO2 regulatory tax with his
15 testimony. But I'm wondering, as you are thinking of the Burns
16 & McDonnell testimony, who are you thinking of or is it that
17 witness?

18 A. Well, it's my understanding that the work that you are
19 referring to, Burns & McDonnell analyzed the impact of the
20 Minnesota environmental externality range of costs and that is
21 the three dollars and something that I think you refer to. In
22 addition to considering the range of Minnesota environmental
23 externality costs, Burns & McDonnell also looked at a couple of
24 other alternative scenarios for the purpose of analyzing what
25 impact, if any, that would have on the decision of the Big

1 Stone II project applicants for this project.

2 Q. And I think we may have to cover this through our
3 witness testimony, but let me just make one final attempt to
4 see if you and I are on the same page of this. Do you
5 understand externalities to be something that is a figure that
6 you do not pay and did not apprise this commission of as a cost
7 in the Big Stone II project here?

8 MR. SASSEVILLE: Object to the form of the question.
9 It's ambiguous.

10 MR. SMITH: Can you rephrase the question to be more
11 clear as to what you are getting at?

12 MR. O'NEILL: Sure. I'll try again.

13 Q. (BY MR. O'NEILL) In your providing the commission
14 here for the cost of this project, are you and I in agreement
15 that you do not have the Big Stone II Unit co-owners having a
16 future CO2 regulatory costs figured in?

17 A. We are not in agreement. I think that we have
18 analyzed the decision to select the Big Stone II project in
19 consideration of those things that you are discussing.

20 Q. I understand that they are considered, but can you
21 point to me a cost that you attributed to the CO2 future
22 regulation?

23 A. There are various costs that we analyzed in the
24 consideration of the Big Stone II project and I've indicated in
25 my previous responses those costs included that set forth in

1 the Minnesota environmental externalities issue as well as
2 other specific costs. I believe that the Burns & McDonnell
3 analysis looked at the California cost of \$8 a ton and we also
4 had Burns & McDonnell take a look at what the cost could rise
5 to before it would affect the decision between alternatives.

6 Q. Okay. Let's move on to forecasting other legislation.
7 In your testimony on rebuttal, it would be Exhibit I think it
8 was 29 on page one, line 16, you had referenced a letter that
9 was written by Otter Tail Power to South Dakota PUC advising
10 regarding the problems that the BS II co-owners were having
11 with the delivery of coal from the Powder River Basin. Do you
12 remember that testimony?

13 A. Yes, I do.

14 MR. GUERRERO: Could I interrupt and ask to go off the
15 record for a second, Mr. Hearing Examiner?

16 MR. SMITH: Yes, let's go off the record a minute.

17 (Discussion held off the record.)

18 MR. SMITH: We are back on the record. Can you please
19 reread the question?

20 (Whereupon, the Court Reporter read back the requested
21 portion.)

22 Q. (BY MR. O'NEILL) And continuing on in your testimony
23 on page three, you suggest the issue can be dealt with through
24 activity in the United States Congress and you also write that
25 an inadequate rail transportation system will not be tolerated.

1 Do you remember that?

2 A. Yes, I do.

3 Q. So if we understand this statement correctly, it's
4 possible that future federal legislation will be coming to
5 insure coal delivery to BS II by the railroad companies.

6 A. I believe that my testimony indicates that there are a
7 range of things that would impact on the deliverability of coal
8 in the future and that federal legislation might be among those
9 alternatives.

10 Q. Okay. Going back to your direct testimony, there was
11 a reference on California blackouts on Exhibit 1, page seven.
12 Do you remember your testimony in regard to that?

13 A. Yes, I do.

14 Q. Would you agree with me that the problems that arose
15 in California were because of manipulating energy markets, that
16 energy companies were manipulating energy markets and they were
17 withholding existing generation from the market?

18 MR. SASSEVILLE: I'll object, lacks foundation.
19 Assumes facts not in evident.

20 MR. O'NEILL: It's a question, counsel.

21 MR. SASSEVILLE: I understand. That's my objection.

22 MR. SMITH: Overruled.

23 A. Would you repeat the question?

24 Q. (BY MR. O'NEILL) Sure. Would you agree with me that
25 the California blackouts that you reference in your testimony

1 on page seven of Exhibit 1 were -- the energy companies'
2 problems were determined to be because the energy companies
3 were manipulating energy markets and they were withholding
4 existing generation capacity from the market?

5 A. In general, I would agree. I think, however, that my
6 conclusion would be the same, and even while it may be possible
7 that in California the balance between resources and demand may
8 have been, as you suggest, manipulated by participants in the
9 market, it is my belief that the results are the same. You had
10 volatility and disruption caused by an imbalance between supply
11 and demand. I think what you are suggesting is that the amount
12 of supply was withheld because of action of the market
13 participants, but I think that the result would be the same if
14 the imbalance between supply and demand had been caused by some
15 other reason.

16 Q. Just going back to the issue on the coal delivery,
17 besides possible federal legislation, what other manner would
18 you use to try and overcome any problems?

19 A. Sure. If you take a look at the Big Stone site, you
20 will -- and I don't have a railroad map here, but I think that
21 we're all familiar with the geography. For the most part, the
22 coal that comes to the Big Stone plant travels on a portion of
23 the rail system that is much less heavily trafficked than
24 deliveries going in other directions out of the Powder River,
25 for example. So congestion is probably a function of what is

1 happening in the immediate area of the Powder River, but I
2 don't believe that congestion is necessarily a problem once we
3 get to the main line in Montana and then delivered to the
4 plant.

5 So one of the things that we could do to enhance the
6 delivery to the Big Stone plant would be to increase the
7 velocity of the train traffic once it gets to the main line, in
8 between there and the plant. There are a number of things that
9 we could do to improve the deliverability to the Big Stone
10 plant. Included in the list of options would be increasing the
11 number of cars per train, and that could be -- right now we go
12 from 120 cars basically to there's nothing that would say that
13 we could not go to 150 or 160 cars per train.

14 In order to do that, it might require the construction
15 of some additional sidings so that the length of those sidings
16 would accommodate larger trains, but in the overall scheme of
17 things, lengthening a few sidings would be relatively
18 inexpensive. I don't think that we are looking at a situation
19 where we have to provide double track all the way from the
20 Powder River to Big Stone. I think that there are some very
21 feasible alternatives that would allow us to rather
22 expeditiously increase the velocity of the traffic to the Big
23 Stone site.

24 I'm aware that the railroads themselves are looking at
25 adding some additional double tracking and triple tracking

1 within the Powder River itself to relieve the congestion within
2 the vicinity of the mines. All of those are solutions that I
3 think that would come well before the construction of Big Stone
4 II. You have to keep in mind that the railroads are in
5 business as well and they certainly see an opportunity to
6 increase their productivity by eliminating these congestion
7 points.

8 Q. Turning now to rate forecasts, again, directing your
9 attention to your Exhibit 1, page seven, lines nine through 10,
10 the discussion I believe in that area was regarding the
11 customer and the rates, and then there was a discovery request
12 that the staff had made, their third data request, and I
13 believe this -- is this a confidential response? If we could
14 have this marked and we have 12 copies, I'll show it to you so
15 that you have it.

16 MR. SASSEVILLE: Is it going to be an applicants' or
17 intervenors' exhibit? We are doing double marking numerically.

18 MR. O'NEILL: It would be a Joint Intervenors' 1,
19 then.

20 MR. SASSEVILLE: I think you already have 1. Go to
21 the end of your list.

22 MR. O'NEILL: Okay. Joint Intervenors' Exhibit No. 8.

23 EXHIBITS:

24 (Joint Intervenors' Exhibit No. 8 marked for
25 identification.)

1 MR. SMITH: I think we've all got it now.

2 MR. O'NEILL: Okay.

3 Q. (BY MR. O'NEILL) Mr. Uggerud, I'm directing your
4 attention to Request Number 41, the question states, Please
5 provide Big Stone II's projected rate impact for each applicant
6 South Dakota customers. Response, there exists no projected
7 rate impact information for the applicants' South Dakota
8 customers based on Big Stone Unit II alone. Was that the
9 answer provided? Did I read that correctly?

10 A. You read from what I'm reading, yes.

11 Q. Okay. And is that accurate as to what the position of
12 OTP and other Big Stone Unit II co-owners is as it relates to
13 rate increases for South Dakota customers?

14 A. I believe that to be correct.

15 Q. Would it refresh your recollection if we showed you
16 some additional board of directors meeting minutes? And I do
17 understand that these are confidential so I think we would have
18 to have a confidential discussion if I were to go into these.

19 MR. SMITH: Is that what you want to do that?

20 MR. O'NEILL: Yes.

21 MR. SMITH: At that point, if we're going to go into
22 confidential numbers, unless Otter Tail is willing to waive
23 that and any other applicable applicants, we are going to have
24 to clear the room of persons who have not signed a
25 nondisclosure agreement.

1 MR. GUERRERO: Mr. Hearing Examiner, could I interject
2 a question to counsel? Does the information relate to Otter
3 Tail or does it relate to board minutes of one of the other
4 applicants?

5 MR. O'NEILL: Otter Tail.

6 MR. GUERRERO: Could we take a moment to look at them
7 with Mr. Uggerud to see whether or not he's willing to waive
8 the confidential?

9 MR. SMITH: Absolutely. Shall we take a short recess
10 here of about ten minutes? Ten minutes, would that be --

11 CHAIRMAN SAHR: Yes.

12 (Whereupon, the hearing was in recess at 10:50 a.m.,
13 and subsequently reconvened at 11:05 a.m., and the following
14 proceedings were had and entered of record:)

15 EXHIBITS:

16 (Joint Intervenors' Exhibit Nos. 9 and 10 marked for
17 identification.)

18 MR. SMITH: We are back on the record following a
19 short recess. Counsel, are you prepared to address the issue,
20 then, of confidentiality with respect to the question that MCEA
21 has posed?

22 MR. SASSEVILLE: Yes, Mr. Smith. We are going to
23 assert the confidentiality treatment with respect to these
24 documents so we would ask that those who are here in the room
25 who have not signed the confidentiality order temporarily leave

1 the room, except for the commissioners.

2 MR. SMITH: And I don't know who all of those people
3 are, but if you haven't, I have to trust your honor. Do you
4 know who they are, Mr. Sasseville?

5 MR. SASSEVILLE: I haven't tabulated all of them, but
6 we believe that those who haven't signed are in the process of
7 vacating the room.

8 MR. SMITH: I don't know if staff all signed an
9 agreement, but whether they did or not, they are bound by rule
10 and thereby by statute to keep confidential anything that you
11 filed under seal.

12 MR. SASSEVILLE: We are comfortable with that,
13 obviously.

14 MR. SMITH: And we need to shut off the Internet.
15 Otherwise the whole world -- it will be irrelevant.

16 MR. WELK: We will have cleared the room and the world
17 hasn't.

18 MR. SMITH: Everybody else in the world will know.

19 MR. SASSEVILLE: As a housekeeping item, I note that
20 Mr. O'Neill did not offer Joint Intervenors' Exhibit 8 into the
21 record.

22 MR. SMITH: He has not?

23 MR. SASSEVILLE: He has not. We have no objection.

24 MR. SMITH: My notes so reflect that you have not
25 offered it. Do you want to offer it during the confidential

1 part or does it matter?

2 MR. O'NEILL: I can offer it during the -- I can offer
3 it during the confidential part.

4 MR. SMITH: Okay. Are you offering it now?

5 MR. O'NEILL: Yes.

6 MR. SMITH: There is no objection?

7 MR. SASSEVILLE: Correct.

8 MR. SMITH: Objection from staff? Obviously it's kind
9 of awkward because Ms. Stueve isn't in here, but I'm assuming I
10 guess we can ask her if I remember when she comes back in.

11 CHAIRMAN SAHR: Is she not here because of
12 confidentiality reasons?

13 MR. SMITH: Yeah. I am going to admit the exhibit
14 subject to her later right to object if she so chooses and
15 maybe I'll have to change my mind. Do you need to repeat your
16 question or do you want it to be read back from the transcript?

17 EXHIBITS:

18 (Joint Intervenors' Exhibit No. 8 received into
19 evidence.)

20 MR. O'NEILL: Why don't we have the question read back
21 and then I'll formally have these confidential documents
22 marked.

23 (Whereupon, the Court Reporter read back the requested
24 portion.)

25 MR. O'NEILL: For purposes of the record, I'm going to

1 have what's marked as confidential Exhibits No. 9 and 10, the
2 board of directors minutes from March 4th, 2005 of Otter Tail
3 Corporation and then retail rate forecast would be Exhibit 10,
4 another confidential document. We would offer those into
5 evidence.

6 MR. SMITH: What was No. 9 again?

7 MR. O'NEILL: The board of directors regular meeting
8 minutes.

9 MR. SMITH: Of what date?

10 MR. O'NEILL: March 4th, 2005.

11 Q. (BY MR. O'NEILL) Mr. Uggerud, directing your
12 attention to --

13 MR. SMITH: Hold on a second. As I understand it, you
14 have offered MCEA's 9 and 10.

15 MR. O'NEILL: 9 and 10, yes.

16 MR. SASSEVILLE: If you don't mind, Mr. O'Neill, could
17 you lay foundation for these exhibits with the witness?

18 MR. O'NEILL: Sure.

19 Q. (BY MR. O'NEILL) Mr. Uggerud, place in front of you
20 if you can what has been marked as Exhibit No. 9, the regular
21 meeting, board of directors, Otter Tail Corporation, March 4th,
22 2005.

23 A. Yes.

24 Q. Do you recognize that document?

25 A. After reviewing it, yes. I had not seen the -- and I

1 don't normally see the minutes of our board meetings, but I
2 have reviewed these minutes that you have put before me and
3 would not disagree that they are the minutes of the board
4 meeting for that date.

5 Q. In fact, you were present at that board meeting it
6 looks like.

7 A. I can't say that I was present for all of it, but I
8 was present for some of it, yes.

9 Q. Okay. And you have had, prior to today, an
10 opportunity to look at these board meeting minutes?

11 A. No. No, this was the first that I have seen them.

12 Q. And do you agree -- well, for foundation purposes,
13 based upon that, the fact that you have now reviewed them, do
14 you believe that they truly and accurately depict the meeting
15 as you were there on that date?

16 A. I would not disagree that they depict the minutes of
17 the meeting on that date.

18 MR. O'NEILL: We would offer this into evidence as
19 Exhibit No. 9.

20 MR. SASSEVILLE: No objection to No. 9.

21 MS. CREMER: Staff has no objection.

22 MR. SMITH: No. 9 is admitted.

23 EXHIBITS:

24 (Joint Intervenors' Exhibit No. 9 received into
25 evidence.)

1 Q. (BY MR. O'NEILL) Mr. Uggerud, Exhibit No. 10, would
2 you place that in front of you?

3 A. I have it, if you can identify -- okay, yes.

4 Q. Retail rate forecast.

5 A. Yes.

6 Q. Are you familiar with that document?

7 A. I see it and recognize it, yes.

8 Q. Do you believe that that document truly and accurately
9 states the facts as it relates to the retail rate forecast for
10 Otter Tail Power Company?

11 A. I think that to put it in the context, it represented
12 I suspect in March of 2005 an estimated projection that was put
13 forth before our board of directors with regard to a number of
14 items that might have rate case impacts. I don't believe that
15 the document relates exclusively to Big Stone II. There are
16 other items in there and I don't believe that it relates
17 specifically to South Dakota's customers. At the start of your
18 question --

19 Q. Before we get into questioning, and you will have an
20 opportunity to speak, but I'm just looking for foundational
21 purposes. Does this truly and accurately depict the retail
22 rate forecast of Otter Tail Power Company as contained in this
23 exhibit?

24 A. I think that my answer will be that I'm not sure that
25 it does. I think that what it was was a projection that was

1 made for the board of directors over a year ago and I don't
2 think that it is the same as a formal rate case projection that
3 we would submit to any commission for consideration or
4 application today. It's a slight -- it's just a slightly
5 different thing, but I think that what it was was a ballpark
6 projection that was offered to the board over a year ago. I
7 know that it was not a detailed rate case evaluation and was
8 not intended to be used for that purpose.

9 Q. But someone on behalf of Otter Tail Power came up with
10 this retail rate forecast, at least as of March of 2005.

11 A. I'm not disputing that.

12 MR. SMITH: Do you have copies of this so we know what
13 we're looking at?

14 MR. O'NEILL: Yep, sorry.

15 VICE-CHAIR JOHNSON: Is this JI 10?

16 MR. SMITH: Yeah. Proceed, please.

17 MR. O'NEILL: For purposes of this hearing, we would
18 offer Exhibit No. 10.

19 MR. SASSEVILLE: The applicants object based on lack
20 of foundation.

21 MR. SMITH: Staff?

22 MS. CREMER: Staff has no position.

23 MR. SMITH: I'm going to overrule the objection and
24 admit the exhibit.

25 EXHIBITS:

1 (Joint Intervenors' Exhibit No. 10 received into
2 evidence.)

3 Q. (BY MR. O'NEILL) So back to -- the line of
4 questioning that we started with before we got into these two
5 confidential documents was on Exhibit 8, question by staff,
6 provide Big Stone II's projected rate impact for each
7 applicant's South Dakota customers, and I'm wondering, based
8 upon reviewing these two subsequent exhibits if there is a
9 change in the position of Otter Tail since answering this
10 interrogatory to the staff, that there is a projected rate
11 impact that is going to happen because of Big Stone II, as
12 stated in Exhibit No. 9 and as stated in Exhibit No. 10.

13 MR. SASSEVILLE: I'll object. To complete the
14 question, Interrogatory 41 specifically refers to rate impact
15 for South Dakota customers.

16 MR. O'NEILL: Right. Go ahead.

17 MR. SASSEVILLE: You may answer.

18 A. I may answer? There were times when I wish I was an
19 English teacher instead of an engineer. The question as I read
20 it on Exhibit 8 asks whether or not the project had made a rate
21 impact study for each of the applicant's South Dakota
22 customers, and as I read the construction of Question 41, no,
23 the project had not made a rate impact determination for each
24 of the South Dakota customers of each of the project
25 participants.

1 That's slightly different than sitting before me for
2 my comment work that had been done for Otter Tail Power Company
3 on a systemwide basis for consideration for a different
4 purpose. You have to keep in mind that what was presented to
5 the board of directors of our company in March of 2005 was a
6 ballpark analysis and estimate as to the potential that the
7 company might have for rate increases in the future,
8 considering a number of different things, of which, yes, there
9 is a line item for Big Stone II as a part of that.

10 But again, I would just -- again, it's a nuance, but I
11 would just remind everybody that this was not a full rate case
12 analysis and determination and was not put forward to the board
13 for the purpose of approving a rate case application. It was
14 advisory with regard to the fiduciary responsibility of the
15 board of directors to be aware of the potential need for future
16 financial considerations, capital expenditures, potential rate
17 case consideration, those types of things. But it was a
18 systemwide screening analysis rather than a specific South
19 Dakota rate case determination.

20 Q. (BY MR. O'NEILL) Well, in looking at Exhibit 9,
21 what's written on the third page, I'll read it and just let me
22 know if I'm reading it accurately. It is expected that as a
23 result of the development of this plant, it's referring to the
24 Big Stone II plant, Otter Tail Power Company will need to bring
25 rate cases in Minnesota in 2006, 2009, 2011, so forget about

1 the interrogatory for a second, forget about what we have just
2 talked about as it relates to your response in that regard, but
3 it's true that on March 4, 2005, it was thought that there will
4 be a need to bring rate cases in Minnesota on three
5 consecutive -- three years, 2006, '9 and '11; is that true?

6 A. At that time it may have been presumed that that would
7 be the case. I can tell you as I sit before you today that we
8 have no rate case in Minnesota for 2006, so things change and
9 certainly one of the things that has changed would be the
10 portrayal of those things relating to our rate cases. And I do
11 not believe that if we were to be making a precise
12 determination today that the Exhibit 10 numbers would
13 necessarily still be those that we would offer to our board or
14 to the commission.

15 Q. Has there been any discussion at a board meeting since
16 March 5th, 2005 in which it was stated that we will not be
17 seeking a rate case in 2006, 2009 or 2011?

18 A. That would be beyond my ability to answer. I do not
19 attend board meetings.

20 Q. I'm just asking for your familiarity, whether you were
21 at a board meeting or whether just as it relates to your
22 position with the company, are you familiar with any backing
23 off of the statement that there will not be a need to bring
24 rate cases in those three years?

25 A. Well, certainly a project like this will come with it

1 a need for rate cases. I can't tell you today that it will be
2 2006, 2009 and 2011, and I'm certainly not prepared to tell you
3 what the amounts of those rate cases will be. All I was trying
4 to portray was I know that there is not a 2006 rate case
5 application in Minnesota. I believe that there will be one in
6 2007, but certainly there is not one in 2006.

7 Q. And focusing on Exhibit No. 10, who is the best source
8 for knowledge of the statement that there would be a 9.2
9 percent increase in the rates in 2011 if you are not?

10 A. Well, I personally didn't prepare document labeled as
11 Exhibit No. 10. It's my understanding and my recollection,
12 again, I'm not 100 percent certain, but it's my belief that
13 there was an individual who prepared this document who probably
14 is, if I recall the circumstances of this right, I don't think
15 that individual is still with the company. There was somebody
16 in the financial area of our company that I believe put this
17 document together. I don't believe that he's currently an
18 employee of the company.

19 Q. On a likelihood scale, is it likely that there will be
20 rate -- that you will be seeking rate cases to increase or
21 decrease the rates?

22 A. Well, on a likelihood scale, a project of this
23 magnitude will undoubtedly come with a request for a rate
24 increase.

25 MR. O'NEILL: I don't have any further questions at

1 this time.

2 MR. SMITH: I guess the next order of business is
3 bringing the folks in from outside. Pardon me. Do you want to
4 do any redirect with respect to the confidentiality part?

5 Okay, I'm sorry. Why don't we do that.

6 MR. SASSEVILLE: Actually, I probably should, thinking
7 that something might come up that ought to be covered by the
8 confidentiality clause. Maybe I'll do a little redirect right
9 now if that's okay.

10 REDIRECT EXAMINATION

11 BY MR. SASSEVILLE:

12 Q. Mr. Uggerud, could you identify the person you believe
13 may have authored Exhibit 9, if you know, the person you
14 believe may have authored Exhibit 9?

15 A. I believe that it was an individual by the name of Jim
16 Nessa.

17 Q. What was his position with Otter Tail at the time?

18 A. I'm not sure what his title was, but he was in our
19 financial planning analysis area.

20 Q. Was he a lawyer?

21 A. No, he was not.

22 Q. And was he part of the regulatory compliance
23 department or division of Otter Tail?

24 A. No, he was not.

25 Q. Do you know if he understood the legal requirements

1 for bringing rate cases in the state of Minnesota?

2 A. I don't think that he was developing information based
3 on any knowledge or awareness of that. I think that it was, as
4 I indicated in a previous answer, it was an attempt to apprise
5 our board of directors with regard to a relative impact of a
6 number of things, including the Big Stone II.

7 Q. Based on your knowledge and experience of Minnesota
8 regulatory law, is it your understanding that Big Stone -- I'm
9 sorry, that Otter Tail Power can actually bring a rate case
10 based on Big Stone II without the plant having been built?

11 A. I'm not in our rate and regulatory area, so I can't
12 answer to that. I know that as an engineer and having heard
13 discussions relative to rate cases, that there are issues that
14 have been discussed relative to preapproval of large projects.
15 I can't testify as to what the intention of the company is with
16 regard to seeking any preapproval or waiting until after
17 construction is entirely complete with regard to the recovery
18 of this. That's outside of my area of expertise and I'm not
19 prepared to offer testimony on that in any way.

20 Q. Generally speaking, does the Minnesota Public
21 Utilities Commission allow regulated utilities to recover
22 investment for assets that are not actually used and useful at
23 the time of the recovery?

24 A. I know that historically I have heard it characterized
25 that way. I would not be in a position to offer opinion as to

1 whether the circumstances as they exist today would allow for
2 any other type of treatment than that. Again, that would be
3 outside of my area of responsibility.

4 Q. Do you know, Mr. Uggerud, what the impact on rates
5 would be if the Big Stone II project were not built?

6 A. Well, this is where I'm glad that I'm an engineer
7 instead of an English teacher because, yeah, it is my opinion
8 that absent the construction of Big Stone II, that the
9 alternatives that would be before us for meeting the load
10 requirements of our customers would actually result in higher
11 rate increases than those that we would project from the
12 completion of this project. In fact, that is the very essence
13 of the selection and the timing for this project as compared to
14 other alternatives that would be available before us.

15 Q. And you had mentioned that Exhibit No. 10 in your view
16 is not a rate impact study; is that your testimony?

17 A. No, I think that it probably was an attempt to provide
18 a preview, if you will, to the board as to what the rate impact
19 needs of the company might be, but I know that it was not a
20 detailed rate case preparation analysis. I think that it was
21 more for the purpose of apprising the board in a very general
22 and broad overview sort of perspective what the financing and
23 capital expenditure requirements of the utility going forward
24 would be. If you take a look at Exhibit 10, you will see that
25 the largest attributable number there is for a line item called

1 Clear Skies in 2011.

2 Q. Could you point to the page for the record, Mr.
3 Uggerud?

4 A. It's on page -- it is labeled as page 28, it's the
5 first page I see before me on Exhibit 10. It has a 28 in the
6 lower right-hand corner. But I don't think that there is
7 anyone that is currently of the opinion that Clear Skies will
8 be the governing environmental legislation impacting utilities
9 in 2011.

10 At one time that was a major initiative of the
11 administration of this country and there was a rather concerted
12 legislative attempt to enact Clear Skies and as a part of this
13 presentation to the board in March of 2005, one of the things
14 that we had done was to give some indication to the board as to
15 what the relative magnitude of Clear Skies might be. I don't
16 know that Exhibit 10 identifies it. It probably does, there is
17 I think some detailed spread sheets at the back that I have not
18 reviewed specifically, but I would guess that if you were to
19 look at them, what you would find included in those numbers
20 would be some estimates with regard to what the capital
21 expenditure requirements to enact a Clear Skies situation might
22 involve, and I can say with confidence that that is what we
23 were trying to portray to the board at that meeting in March of
24 2005, was an overview of potential impacts for the purposes of
25 the broad financial considerations that boards of directors

1 need to be apprised of.

2 Q. In order so they can fulfill their fiduciary duties to
3 the company and the shareholders.

4 A. That's right.

5 Q. And just so the record is clear, could you explain
6 what Clear Skies means?

7 A. Well, Clear Skies was a legislative initiative that
8 was offered by President Bush that would have set forward
9 specific emissions reduction targets for sulphur dioxide and
10 nitrous oxides and mercury. I believe that in a general way,
11 they called for reductions of approximately two-thirds from
12 existing levels of those pollutants.

13 Q. Okay. That's all I have, thanks.

14 MR. SMITH: Just a sec here. I neglected in my
15 confusion over bringing people in and whatever to inquire as to
16 whether staff had any cross-examination of this witness
17 regarding at least the confidential.

18 MS. CREMER: Not the confidential portion, thank you.

19 MR. O'NEILL: I had one clarification. I think you
20 were talking about Exhibit 10 that Mr. Nessa, is it Nessa, had
21 drafted, not Exhibit 9; is that right? I want the record to be
22 clear. Mr. Sasseville, I think your question was --

23 MR. SASSEVILLE: That's right, my question should have
24 been addressed to Exhibit 10, Joint Intervenors' Exhibit No.
25 10.

1 A. I was referring to this document when I referred to
2 Mr. Nessa.

3 MR. SASSEVILLE: The record should reflect that he was
4 holding Joint Intervenors' Exhibit 10.

5 MR. SMITH: Do the commissioners have any questions
6 regarding the confidential portion?

7 CHAIRMAN SAHR: I have none.

8 VICE-CHAIR JOHNSON: No, sir.

9 MR. SMITH: I think we are done with that and, Martin,
10 do you want to instruct the public that they may enter?

11 (Brief pause.)

12 MR. SMITH: I will note for the record that we are
13 back in the public portion of the hearing, having followed a
14 confidential break, and all of the persons in attendance at the
15 hearing have returned to the room. Are you still -- do you
16 have further questions, Mr. O'Neill, regarding the public
17 portion?

18 MR. O'NEILL: I do not.

19 MR. SMITH: Ms., is it Stueve or Steuve?

20 MS. STUEVE: Stueve.

21 MR. SMITH: Ms. Stueve, do you have cross-examination
22 of this witness?

23 MS. STUEVE: Yes, I do.

24 MR. SMITH: Please proceed.

25 CROSS-EXAMINATION

1 BY MS. STUEVE:

2 Q. Is it Mr. Uggerud?

3 A. Yes, it is.

4 Q. Okay.

5 A. Thank you.

6 Q. Yes.

7 A. It takes a Norwegian to do that.

8 Q. I'm close to a Norwegian, Swedish, Carlson.

9 A. I'm half Swede.

10 Q. There we go. Thank you for coming and thank you for
11 your testimony. I'm looking at Exhibit 1 under direct
12 testimony on page five, line 22, and I see here a statement
13 Otter Tail Corporation does not have any parent companies, then
14 it goes to the next page, and no publicly-held corporation has
15 a 10 percent or greater ownership interest in Otter Tail
16 Corporation. My question would be do we have a list of who
17 does have ownership and in particular does Bill Gates or
18 Microsoft Corporation have a 10 percent interest?

19 MR. SASSEVILLE: I'll object, lacks foundation and on
20 relevance grounds.

21 MR. SMITH: Sustained.

22 Q. (BY MS. STUEVE) Let's go to the next one. On page
23 seven, Exhibit 1, and I'm pleased to see that you note Otter
24 Tail's customers live and operate businesses in rural areas,
25 small towns and city. That's my homeland for over forty-some

1 years, rural borderland there, Big Stone County. And that we
2 live on relatively modest incomes and don't have the means
3 economically to absorb rate increases. So it looked like the
4 first factor you said you considered was the necessity of
5 maintaining affordable rates. So it's a two-part question
6 here.

7 You also say further down on line 13, Otter Tail is
8 many of your customers' only source of power and energy and if
9 Otter Tail fails in its obligations to maintain a sufficient
10 supply of reliable and affordable power and energy, the first
11 to suffer from the company's failure to maintain adequate
12 supply resources will be Otter Tail's customers. I appreciate
13 that.

14 The question I would have would be with the coal
15 delivery problems, and I do believe in May, Otter Tail Power,
16 correct me if I'm wrong or fill me in, but presented to the
17 South Dakota Public Utilities Commissioners an update, a
18 PowerPoint presentation on what does this mean.

19 A. Right.

20 Q. That's correct, and it was public or it's accessible
21 on the Internet, the PowerPoint presentation?

22 A. I assume so. I did not make the presentation, but I'm
23 generally aware that the commission was updated with regard to
24 the rail situation.

25 Q. Yes. Thank you. And I know one of the slides on the

1 PowerPoint presentation, and I accessed it via on line, talked
2 about Otter Tail Power or the utilities being, Otter Tail Power
3 in general being a captive customer to the rail.

4 A. That is correct.

5 Q. That's correct, okay. My question would be also when
6 you say that many of the customers, Otter Tail's the only
7 source of power and energy, would you consider customers as
8 also being captive customers?

9 A. Yes, I think that there is an inference that if a
10 customer had no other sources of electricity but Otter Tail,
11 that yes, indeed, they would be similarly situated to what we
12 are relative to the Burlington Northern.

13 Q. Thank you. On line 18, Otter Tail is subject to the
14 same risk of rolling blackouts and brownouts that the state of
15 California experienced several years ago. Was any study done
16 or do we have any of the numbers, was an analogy or comparison
17 made of demographics and context situation between California
18 and rural Minnesota?

19 MR. SASSEVILLE: Object, it's a multiple question.

20 Q. (BY MS. STUEVE) Let me try again. Do we have numbers
21 from Otter Tail Power looking at demographics?

22 A. No, we do not. It wasn't the demographics that I was
23 referring to, it was very simply the relationship that exists
24 between supply versus demand and the situation in California
25 was there were price volatilities associated with an imbalance

1 between supply and demand. There's been previous suggestion
2 that the supply was affected not by the installation of
3 sufficient resources but by the manipulation of those, but in
4 either event, it was a relationship between supply and demand
5 and that was the reference that I was referring to here, is
6 that when you are in the business of providing electricity to
7 your customers, that's a very important relationship, that
8 between supply and demand, and it doesn't matter whether it's
9 electricity or whether it's any commodity, a scarcity of a
10 necessary commodity will tend to drive the price up.

11 Q. Thank you. Although I live in Sioux Falls now, I'm a
12 South Dakota resident, I was for many years a Minnesota
13 resident and I'm one of thousands from that area, Otter Tail
14 Power customer many years, and actually still in family home,
15 but thousands have left and census bureau statistics show a
16 negative trend in the area. Was that taken into consideration
17 or is demand going up even though the census bureau statistics
18 show in the arena that. . .

19 A. We are certainly aware of the demographics, if you
20 will, of small, rural towns. But in spite of that, we have
21 pockets within our service territory that grow, and even within
22 some of the larger towns, there certainly are economic
23 development efforts underway in most all of the communities we
24 serve. I'm very familiar with attempts to get pasta plants and
25 malting plants and ethanol plants and manufacturing facilities

1 and I think that it's universal across not only our service
2 territory, but across the country.

3 Q. I'd like to go to page 11, lines three through seven
4 and just the ending piece there says Otter Tail, on line six,
5 expects that debt raised for the project will be on an
6 unsecured basis. Can you explain what that would mean for
7 customers versus shareholders?

8 A. Well, I think that the purpose of the testimony that
9 I'm giving here is to point out that Otter Tail Power Company
10 as an investor-owned electric utility will have a capital
11 structure wherein the owners of the company will actually put
12 forth 50 percent of the total project cost and only 50 percent
13 of it would be borrowed as loans from a bank, if you will.

14 Q. And who would be affected if there was a default on
15 that?

16 A. I don't know. I am not in the finance area of our
17 company, so as to what the effects would be of a default on a
18 loan, I'm not prepared to answer that.

19 Q. And so this will -- we will probably get the same
20 response, but do we have the total amount? What would the 50
21 percent borrowed be for Otter Tail Power?

22 A. I'm not sure that I understand the question.

23 Q. I just heard you say the owners would have 50 percent
24 and 50 percent -- would put up 50 percent and that 50 percent
25 would be borrowed.

1 MR. SASSEVILLE: Just to correct the record, Ms.
2 Stueve, it's Otter Tail and not the owners.

3 MS. STUEVE: Otter Tail, thank you.

4 Q. (BY MS. STUEVE) My question would be -- I lost my
5 track.

6 MR. SMITH: I think you were asking him how much money
7 we are talking about with respect to Otter Tail; is that
8 correct?

9 MS. STUEVE: Right, yes.

10 A. Well, I'm not sure that this will be responsive, but I
11 will try, okay? If the project is \$1.2 billion and if Otter
12 Tail is roughly 19 percent of that and let's figure 20 percent
13 just for ease of math, 20 percent of \$1.2 billion would be \$240
14 million, and of that amount, of that \$240 million, the owners
15 or the shareholders of Otter Tail would be contributing \$120
16 million out of their own pocket and then the company would be
17 borrowing from commercial banks the remaining \$120 million.

18 Q. (BY MS. STUEVE) So can you let me know who I would
19 speak to in the finance department or will there be somebody
20 testifying here that I should be getting some of this
21 information from?

22 A. I can try harder perhaps. I'm not sure that I
23 understand yet the nature of your question. I have identified
24 the source of the funds.

25 Q. Right.

1 A. And with regard to the question as to the relative
2 exposure that who, the banks would have?

3 Q. Or customers. What impact will it have if it's an
4 unsecured basis and there's a default, if 50 percent. . .

5 A. I think that even as an engineer, I can answer that
6 question. If there's a default and the company is not able to
7 pay its obligations, the customers are not responsible for
8 picking up the costs of the default. The risk, and that is one
9 of the reasons why investor-owned utilities like Otter Tail are
10 required to put that much equity into a project, the primary
11 risk taker is the owner or the shareholder of a company, and so
12 in the event of a default the first risk would come to the
13 shareholder.

14 Q. Okay. So am I correct in hearing you say that
15 customers aren't liable and won't see --

16 A. Not directly, they aren't.

17 Q. -- rate increases skyrocket to cover a default?

18 A. Not directly. That's not to say that there might not
19 be secondary impacts depending on the manner in which a company
20 comes out of a bankruptcy proceeding, but in terms of a
21 default, customers will not receive bills to help pay for the
22 debt obligations of a defaulting company.

23 Q. On page 12 on lines 20 through 22, and I know we have
24 read a lot in the local papers about the Big Stone II project
25 will likely facilitate the interconnection of increased amounts

1 of renewable wind generation projects. Does Otter Tail Power
2 have the authority or the decision to decide whether wind gets
3 on or not?

4 A. No.

5 Q. And that would be a decision made elsewhere.

6 A. Yes, but I don't mean to answer a question that wasn't
7 asked, but I can tell you that it was a deliberate decision on
8 the part of the Big Stone II owners to actually identify
9 specific transmission increments that would be provided,
10 knowing that the region in which that transmission would be
11 located is a primary wind development area, so there was --
12 while we can't guarantee it, it certainly was a deliberate part
13 of our thought-making process, that by increasing the voltage
14 level of one of the transmission outlet facilities, that it
15 would be the responsible thing to do with regard to providing
16 for the potential that additional renewable resources would
17 utilize that transmission.

18 And we're also aware as to the applications that have
19 been made for transmission service reservations. We can take a
20 look at the queue is what it's referred to in MISO for the
21 ability of future participants to access transmission. We know
22 that in the queue, standing in line are a number of wind
23 generation projects, so it's our anticipation that the most
24 likely beneficiary of that additional transmission capacity
25 would in fact be those particular and specific wind project

1 applications, but we do not make the determination as to who
2 the successful entrants would be.

3 Q. How would the Energy Policy Act of 2005 impact whether
4 renewable energy or wind projects get on -- under HR 6, Title
5 12, Electricity, SEC 1235 and SEC 218, there's a clause in
6 there talking about native load service obligation, and in
7 brief, to sum it up, it seems to appear that those two sections
8 show that this clause, the native load service obligation,
9 could effectively lock out transmission access to renewables
10 such as wind power or others because if they have not been
11 providing end user service obligations at the time of the
12 enactment of this policy, they could be blocked.

13 MR. SASSEVILLE: I'll object. It's argumentative, it
14 calls for a legal conclusion, it lacks foundation and it's a
15 compound question.

16 MR. SMITH: Sustained.

17 Q. (BY MS. STUEVE) Did Otter Tail Power lobby to include
18 native load service obligation in HR 6?

19 A. I certainly did not and I can't speak to whether or
20 not there were any discussions between any of the parties in
21 our company to that. But let me just suggest that it might be
22 that that native load protection would also be what might
23 enable customers in South Dakota or Grenville to have access to
24 the output of wind generators, so it's not clear that the
25 native load protection is an exclusionary thing. It could also

1 put the construction on it that that native load protection
2 would in fact give a first priority to native load customers
3 for the utilization of those transmission facilities, but it's
4 certainly not my position here today to make conclusions as to
5 any direct impact of that law with regard to native load
6 customers and the use of any particular facility for any
7 particular purpose.

8 Q. Thank you. I guess my concern was that one had or an
9 entity had to have an end user service obligation.

10 A. I think the most likely impact, Ms. Stueve, would
11 would be that it could provide a protection rather than a
12 hindrance.

13 MS. STUEVE: Thank you. No further questions.

14 MR. SMITH: Staff?

15 CROSS-EXAMINATION

16 BY MS. CREMER:

17 Q. Thank you. Good morning, still yet I guess, not by
18 much. Did the applicants account for mercury control costs?

19 A. Yes.

20 Q. And how did you do that?

21 A. It's an on going process, but as we have undertaken
22 the specific engineering design of the unit, the things that
23 need to be incorporated into the design with regard to the
24 capture of mercury are a part of that design analysis and so
25 the costs then of those things are included in the estimated

1 project costs for the project.

2 Q. As I understand it, you committed to a cap on our
3 about May 31 of 2006; is that right?

4 A. Yes, that's approximate, yes.

5 Q. About that date. So I guess the question is, if you
6 didn't commit to the cap until then, where is that covered in
7 your testimony before that? Is it something you can point to?

8 A. Well, I can maybe address the issue of the timing of
9 the cap. Certainly the design of the unit is always
10 contemplated that there would be mercury capture and control.
11 But as we have been involved in the permit application and the
12 process of questions and interrogatories and things like that,
13 we were aware that people were asking specific questions about
14 what about mercury, and the federal law is still somewhat
15 indeterminate with regard to mercury.

16 There are requirements on the federal government to
17 establish mercury control standards by a date specific, but we
18 do not have the development of those with a degree of
19 specificity yet. So it was a part of the environmental
20 stewardship of the project participants to say, okay, we will
21 enter into a stipulation even before there are finalized
22 federal standards relative to mercury to provide a degree of
23 reassurance and promise to the people that might be concerned
24 about the impact that this project would have on mercury
25 emissions.

1 That is not to say that we are attempting to avoid any
2 future obligation with regard to federal standards when they
3 are identified. But it was to say that, look, we are not
4 trying to avoid our responsibilities with mercury either and so
5 we did agree to that stipulation. But again, with the caveat
6 that it's not meant to be instead of anything that would come
7 down the road later from a federal standpoint.

8 Q. Do you know, were the federal standards, were those
9 finalized May 31?

10 A. I would have to ask the person who reports to me in
11 the area of our environmental compliance, but it's my
12 recollection that the date of the May 31 was just the date upon
13 which the project participants were able to agree among
14 themselves what the mercury protocol would be. And we could
15 certainly address the question to Mr. Graumann later or for
16 now, if you would wish, but my understanding is that we are
17 still awaiting further direction from the federal government
18 and the May 31st is the stipulation that the project
19 participants entered into among themselves.

20 Q. Okay, thank you. I'll follow up anything with Mr.
21 Graumann, then. Regarding the coal issue, do you have any new
22 information that you can update the commission and the rest of
23 us on related to the coal delivery problem and the appeal to
24 the Eighth District Court?

25 A. Yes, they are two separate issues. With regard to the

1 coal delivery problem, we thought that it was prudent going
2 into the summer season to have a full supply of stockpile.
3 Again, our responsibility, and I take mine seriously, of
4 providing electricity as reliably and economically as possible,
5 a negative outcome for our customers would be to put our
6 customers in a situation of having an imbalance between supply
7 and demand during summer peak season. So it was important to
8 us that we have our stockpile restored to its customary level
9 as we go into the summer, and we accomplished that through
10 various actions that resulted in some curtailment of generation
11 and some alternative deliveries of coal to the site.

12 But we do have a full stockpile now and in fact with
13 regard to future deliveries, we have just within the last few
14 days entered into an agreement for the lease of a third train
15 set and have received approval from the Burlington Northern to
16 actually put that third train set into service, so that will
17 increase by 50 percent our ability to make deliveries of coal
18 to the site.

19 The second part of your question was with regard to
20 the dispute in front of the eighth circuit court of appeals
21 relative to the rate dispute for the cost of deliveries to the
22 Big Stone plant. We had filed a rate case complaint with the
23 Surface Transportation Board. A decision in that case denied
24 the request for reconsideration of those rates. We have
25 appealed that decision of the Surface Transportation Board to

1 the eighth circuit court. It will be several months before we
2 have a decision relative to that appeal.

3 Q. Okay. So you said you were full, your stockpile, you
4 are currently considered full. How many days, if you could put
5 that?

6 A. The way that we calculate the supply in our stockpile
7 is the number of days at full load operation for the power
8 plant, so for example, 30 days is a customary way of measuring
9 the reserves in our stockpile, and 30 days means that we would
10 be able to operate the unit for 30 days assuming that the unit
11 were operated at full load during that period of time.

12 Q. Do you have any -- is there any anticipation of
13 increasing that level beyond the 30 days?

14 A. Increasing the level of stockpile is something that we
15 could consider. However, there are financial implications to
16 the customers in carrying an inventory. It's a product that
17 has got a value and so there are carrying charges associated
18 with that and it would be our preference to be able to secure
19 adequate deliveries through other means rather than to increase
20 the amount of coal in the stockpile. One of the very practical
21 considerations is that is it going to cost you money to put
22 coal into the stockpile and take it out. So every time you are
23 utilizing coal from the stockpile, that coal has a higher cost
24 than if it were being consumed directly from deliveries that we
25 were receiving at the time.

1 Q. And then you said with that third train set, is that
2 what it was?

3 A. Yes.

4 Q. A third one, do you have a date certain when that will
5 start operating?

6 A. We do, and I'm thinking that it is sometime in July is
7 my belief as to when that train set will be delivered.

8 MS. CREMER: That's all I have, thank you.

9 MR. SMITH: Is there redirect?

10 MR. SASSEVILLE: Yes, Mr. Smith, there will be. It
11 might be convenient, I know it would be for me because I have
12 to use the men's room, to do redirect after a break.

13 MR. SMITH: If there wasn't, I was going to excuse
14 him, but if there is, I think we should break for lunch. The
15 commissioners, we had a discussion during our last recess and
16 the decision was made that we would take one hour and 15 minute
17 lunch breaks, which means right now it's five after, so we will
18 reconvene at 20 after and we would appreciate it if everybody
19 would be here a little in advance and be organized so we can
20 start then. Thank you. We are in recess.

21 (Whereupon, the hearing was in recess at 12:05 p.m.,
22 and subsequently reconvened at 1:20 p.m., and the following
23 proceedings were had and entered of record:)

24 EXHIBITS:

25 (Applicants' Exhibit No. 91 marked for

1 identification.)

2 MR. SMITH: Mr. Uggerud, you are still on the stand
3 and sworn. We are back in session after noon recess and we
4 just before lunch, I had asked of the applicants whether they
5 were ready to go forward with redirect. Before that, I'm going
6 to ask whether the commissioners have any questions so in case
7 you need to respond to that on redirect, you will be able to do
8 so. And again, I want to remind the commissioners we are
9 talking about redirect related to nonconfidential, the
10 nonconfidential portion of the testimony only. Any
11 commissioner questions?

12 VICE-CHAIR JOHNSON: I have no questions.

13 CHAIRMAN SAHR: I have none.

14 MR. SMITH: Mr. Sasseville, you may proceed.

15 MR. SASSEVILLE: Thank you, Mr. Smith. We have
16 decided we will not engage in redirect so we are finished with
17 this witness.

18 MR. SMITH: You are excused.

19 MR. SASSEVILLE: At this time, Mr. Madsen has some
20 more housekeeping issues that he would like to attend to, if
21 that's all right.

22 MR. SMITH: By all means. One other, just
23 informational item I want to bring up, we have got what appears
24 to be a very significant Internet audience of this proceeding,
25 and we have been advised by people listening in that it's

1 difficult to hear the witness when he's testifying and so I
2 want to caution witnesses to please get the mike right in front
3 of your mouth and to speak huskily so that we can hear you, so
4 that they can hear you. Thank you. Mr. Madsen.

5 MR. MADSEN: Thank you. And just to get a microphone,
6 I'll come over here. Mr. Smith, just a couple of housekeeping
7 matters. In going through the exhibits that Mr. Welk mentioned
8 at the beginning of the proceedings, we have since marked
9 another one that has come in that Ms. Cremer handed me. It's
10 been filed as of today. This has been marked as Applicants'
11 Exhibit No. 91. It is the stipulation regarding appearance of
12 witnesses. This was a stipulation we signed with regard to
13 witnesses Janelle Johnson, Anne Ketz and Tina Pint. I've got
14 copies here for the parties.

15 MR. SMITH: Is there an objection?

16 MR. MADSEN: We move for the admission.

17 MR. SMITH: That would be 91?

18 MR. MADSEN: Yes, sir.

19 MR. SMITH: Applicants' Exhibit 91 is admitted.

20 EXHIBITS:

21 (Applicants' Exhibit No. 91 received into evidence.)

22 MR. MADSEN: Moving along the list, witness Daniel
23 Jones also filed rebuttal testimony. Mr. Welk previously moved
24 for admission of Exhibit 17, the Jones direct testimony. At
25 this time I would move for the admission of Jones rebuttal,

1 which is Applicants' Exhibit No. 37, and the three exhibits
2 appended thereto, Exhibit 37-A, Applicants' Exhibit 37-B and
3 Applicants' Exhibit 37-C.

4 MR. SMITH: Is there objection?

5 MR. O'NEILL: No objection.

6 MR. SMITH: Exhibit 37-C is admitted.

7 MR. MADSEN: 37 and 37-A through C?

8 MR. SMITH: Pardon me, 37-A through C and 37.

9 EXHIBITS:

10 (Applicants' Exhibit Nos. 37 and 37-A through C
11 received into evidence.)

12 MR. MADSEN: Finally just to continue on the list, we
13 also have, and there was a motion for a judicial notice filed
14 previously along with copies of what's been marked as
15 Applicants' Exhibit No. 53, the draft Environmental Impact
16 Study, and I would move for the admission of Exhibit 53 at this
17 time as well.

18 MR. SMITH: Is there objection?

19 MR. O'NEILL: No objection.

20 MR. SMITH: Ms. Stueve?

21 MS. STUEVE: For some reason, I cannot find the
22 applicants' exhibit index. Is there an extra copy around? Did
23 I receive one?

24 MR. SMITH: I don't know that there is a printed index
25 other than that which is contained within each of the volumes.

1 This would not be on that list. What he's suggesting here is
2 that, as I understand it, is that the draft Environmental
3 Impact Statement prepared by Western Area Power Administration
4 be admitted on judicial notice.

5 MR. MADSEN: That's correct.

6 MS. STUEVE: No objection from Mary Jo and I would --
7 I do not know how to do it, could I move to amend?

8 MR. SMITH: If you have another exhibit or set of
9 exhibits, I would mark those when your time comes and have --
10 and you can make the same kind of motion, assuming it fits the
11 parameters for taking judicial notice.

12 MS. STUEVE: Thank you.

13 MR. SMITH: Staff, do you have an objection?

14 MS. CREMER: Staff has no objection.

15 MR. SMITH: Applicants' Exhibit 53 is admitted.

16 EXHIBITS:

17 (Applicants' Exhibit No. 53 received into evidence.)

18 MR. MADSEN: That's all I had, Mr. Smith. Thank you.
19 Mr. Sasseville will be calling the next witness.

20 MR. SASSEVILLE: I will be introducing my partner,
21 Todd Guerrero, who will be calling the next witness.

22 MR. GUERRERO: Thank you, Mr. Hearing Examiner.
23 Applicants would call to the stand Mr. Mark Rolfes.

24 Thereupon,

25 MARK ROLFES,

1 called as a witness, being first duly sworn as hereinafter
2 certified, testified as follows:

3 DIRECT EXAMINATION

4 BY MR. GUERRERO:

5 Q. Mr. Rolfes, state your name for the record, please.

6 A. Mark Allen Rolfes.

7 Q. By whom are you employed?

8 A. I'm employed by Otter Tail Power Company.

9 Q. In what capacity?

10 A. I am the project manager for the Big Stone II project.

11 Q. Please describe your educational and work experience.

12 A. I have a bachelor of science degree in mechanical
13 engineering. I am a registered professional engineer in the
14 state of South Dakota and Minnesota. I have been in the
15 coal-fired generation business for over 29 years, now in a
16 number of positions. I've served on the Electric Power
17 Research Institute Advisory Committees and the Edison Electric
18 Institute Advisory Committees as well as the Governor's
19 Advisory Committee on Hazardous Waste Management.

20 Q. Mr. Rolfes, do you have in front of you Applicants'
21 Exhibits No. 8 and No. 33?

22 A. Yes, I do.

23 Q. Can you identify those documents, please?

24 A. Applicants' Exhibit 8 is my direct testimony and
25 Applicants' Exhibit 33 is my rebuttal testimony.

1 Q. Mr. Rolfes, if I asked you those same questions today,
2 would your answers be the same that are contained within
3 Applicants' Exhibits 8 and 33?

4 A. Yes, they would.

5 Q. As with Mr. Uggerud, the commission has allowed some
6 indulgence for a brief summary of your testimonies. Could you
7 do that, Mr. Rolfes?

8 A. Yes, I will.

9 MR. GUERRERO: Before he gets done with that, I would
10 like to move Applicants' Exhibits 8 and 33.

11 MR. O'NEILL: No objection.

12 MS. STUEVE: No objection.

13 MS. CREMER: Staff has no objection.

14 MR. GUERRERO: We have one last before summary --
15 well, I'll wait till the summary.

16 MR. SMITH: Applicants' 8 and 33 are admitted.

17 EXHIBITS:

18 (Applicants' Exhibit Nos. 8 and 33 received into
19 evidence.)

20 A. Commissioners, I am the project manager for the Big
21 Stone II project. In my testimony, I cover a lot of the
22 details of the project itself and I'd like to begin with the
23 first slide before you. This shows the service territory of
24 the seven participants, the shaded areas indicating the service
25 territory of the two investor-owned and the cooperatives and

1 the dots indicating all of the communities served by the
2 municipal association. I'd like to point out that the location
3 of the proposed Big Stone II Unit is central to the service
4 territories of the seven participants.

5 In my direct testimony, I cover a number of things on
6 the project, but the most significant ones are the alternative
7 energy sources considered before we arrived at the Big Stone II
8 project. The alternative sites considered before again we
9 arrived at the Big Stone site being the optimal site, the
10 selection of the pulverized coal supercritical technology is
11 the best technology for this project, the fuel source for this
12 project, the time schedule for plant construction, the project
13 costs and future plans for the site.

14 The project structure is comprised of seven utilities
15 functioning as tenants in common with each utility having an
16 equal voice in the decision making process. Otter Tail Power
17 Company is serving as the lead developer for the project and
18 Otter Tail Power Company will be the eventual plant operator.
19 The project costs for the plant portion will be more than \$1
20 billion in 2011 dollars at the time the plant goes into
21 operation. The project site selection process involved looking
22 at 38 potential sites for the project. This list of sites was
23 then narrowed down to six sites that had further investigation
24 and then through a weighted mathematical process, the selection
25 of the best site for a base load resource and that was the Big

1 Stone site was chosen.

2 This is an artist's rendering of the project. The
3 existing Big Stone I is the unit on the right. The unit on the
4 left is the proposed Big Stone II unit. On the far left is the
5 scrubber complex right adjacent to the chimney that will be
6 common for both units. On the far left is the silos for the
7 coal storage. In the foreground is the Northern Lights Ethanol
8 project.

9 The project's schedule, assuming permits are received
10 in a timely manner, would be that site mobilization would begin
11 in the spring of 2007. Site work would start in the summer of
12 2007, steel erection would then follow in 2008, later in 2008
13 the erection of the boiler and steam turbine would begin. In
14 early 2009 the balance of plant activities would begin,
15 construction and installation, with the system -- with systems
16 being completed and checked out and commissioned in 2010 for
17 commercial operation in the spring of 2011.

18 The primary fuel for the site would be Powder River
19 Basin subbituminous coal. This is coming from the Powder River
20 Basin, which is located in southern Montana and Wyoming. And
21 it would be delivered to the plant by the Burlington Northern
22 Santa Fe railroad. Of the consideration for the alternative
23 energy resources before we arrived at the supercritical
24 technology, we had three screening option -- or three screening
25 criteria that had to be met, the technology we were looking at

1 must be applicable for a base load resource, the facility must
2 be available for service when needed, and the facility should
3 enhance the overall reliability of the electrical system. From
4 the alternatives that passed this basic screening, we then went
5 on to look at the cost, the economic effects and the
6 environmental effects of the remaining alternatives.

7 In my rebuttal testimony, I cover two items, minor
8 design changes. As the project is being refined and further
9 engineering done, there are always some minor changes. None of
10 these have changed the basic project structure. And the other
11 thing that I cover in my rebuttal testimony is our agreement
12 with the South Dakota PUC staff recommendation for minimizing
13 any local impact, and we have been working with the local
14 community to start this process already.

15 Q. (BY MR. GUERRERO) Thank you, Mr. Rolfes. With
16 respect to the summary you showed an artist's rendition of the
17 project, you mentioned the Northern Lights Ethanol project.
18 Can you tell the commission whether that's an existing?

19 A. Yes, that's an existing plant. It is undergoing an
20 expansion at this time.

21 Q. And I should have asked you this earlier but with
22 respect to applicant Exhibit 8, are there any corrections,
23 clarifications that you would like to make?

24 A. Yes, I have one very minor correction on page 21 of my
25 direct testimony, line four. Line four should read, and

1 environmental implications as previously described, comma.

2 MR. GUERRERO: With that clarification, Mr. Hearing
3 Examiner, applicants would tender Mr. Rolfes for questions.

4 MR. SMITH: Intervenors?

5 CROSS-EXAMINATION

6 BY MR. O'NEILL:

7 Q. Good afternoon, Mr. Rolfes.

8 A. Good afternoon.

9 Q. What type of issues could arise to cause the costs of
10 this project to increase?

11 A. This of course is a major construction effort that
12 will cover four years. With any effort of this magnitude, it
13 has the vulnerability to increases in commodity prices such as
14 concrete, steel, wire, copper, labor availability. All of
15 these factors on any large project would be exposed to.

16 Q. Anything else besides construction-related increases?

17 A. Those are the ones that come to mind.

18 Q. How about any future CO2 regulatory costs?

19 A. That would be very speculative on my part to go into
20 what future regulatory costs might be.

21 Q. Okay. And for purposes of determining what the cost
22 was, you didn't quantify what the future regulatory costs are
23 going to be, did you?

24 A. For the project, we did not.

25 Q. Okay. Is it possible that there is going to be future

1 regulatory costs, whether or not it's speculative or not?

2 A. Anything is possible.

3 Q. I understand that, but you understand that out in
4 Washington, there has been a couple of laws that have been
5 introduced and it is a topic of concern that has recently been
6 made into a movie, Al Gore has talked on it and CO2 regulation
7 appears to be a very common discussion topic for people in the
8 legislative branches. Would you agree with me?

9 MR. GUERRERO: I guess I would object. Is there a
10 question there or is counsel testifying?

11 MR. O'NEILL: Well, he stated "anything is possible"
12 and I'm just wondering if the fact that we have some current
13 movement in regard to CO2 legislation, does it make CO2
14 regulatory legislation possible?

15 MR. GUERRERO: I guess I would object and I don't mean
16 to be difficult but when he says "current movement," I guess
17 the question is a little vague in my respect.

18 MR. SMITH: Do you want to begin with some
19 foundational questions like is he aware of these things?

20 Q. (BY MR. O'NEILL) Are you aware that there are some
21 current legislation that has been pending out in Washington
22 regarding future CO2 regulation?

23 A. I'm aware that there is proposed legislation.

24 Q. Okay. And if this legislation were to pass, it would
25 pose a cost to the Big Stone II project, isn't that true?

1 MR. GUERRERO: I would object again. The question is
2 vague. Which legislation are we talking about? What kind of
3 costs would it impose? How would it be implemented? It's a
4 little bit more complicated than counsel would suggest.

5 MR. SMITH: I'm going to let you try to answer that.
6 Overruled.

7 A. Could you repeat the question?

8 Q. (BY MR. O'NEILL) Sure. Would you agree with me that
9 the CO2 regulations that Congress could impose could add a cost
10 to the Big Stone project?

11 A. I would agree that it is possible that there could be
12 costs incurred by future regulation.

13 Q. Okay. How about coal delivery cost increases, could
14 that also be another factor that could increase the cost of
15 this project?

16 A. The increase in any commodity or service that we
17 consume could affect the cost of the project.

18 Q. And one of those would be the coal delivery.

19 A. One of those is coal delivery.

20 Q. Then the mercury control equipment, is that also
21 something that could add to the cost of this project?

22 A. Again, anything is possible, but in the design and
23 evaluation of the project, mercury control was one of the
24 parameters that we took into consideration.

25 Q. In looking through your June 9 testimony on pages one

1 through six, you had discussed the design changes to the plant;
2 do you remember when you presented that testimony?

3 A. In my direct or rebuttal?

4 Q. Rebuttal. Sorry. June 9th, Exhibit 33.

5 A. Yes.

6 Q. In the design changes, did you mention any design
7 changes as it relates to greater control of mercury?

8 A. No.

9 Q. On page eight of that same testimony, sorry, it must
10 be Exhibit 8, which is your direct testimony, page -- bear with
11 me a second -- it's page 17. At the top of the page, you
12 write, and I just want to draw your attention to the paragraph
13 so you and I are focusing on the same paragraph, the other
14 backup possibility is existing generation facilities, do you
15 remember introducing that testimony?

16 A. Yes, give me a moment to remember the context, please.

17 Q. Sure. Page 17, line one if I didn't make that clear.
18 Okay, can you describe for us the backup possibility using
19 existing generation facilities that you are describing here in
20 your testimony on page 17, line one?

21 A. You have to remember that the Big Stone project is a
22 coming together of seven utilities. Each utility has a
23 different set of resources and a different set of options when
24 it comes to a statement like this. It's very hard to make more
25 than general statements in regard to the backup of wind

1 resources because it is different for every one of the
2 participants and I do not have intimate knowledge of all seven
3 participants.

4 Q. Do you have any personal knowledge of existing
5 generation facilities that could be used as a backup?

6 A. I have knowledge of the facilities owned by
7 participants, but I do not know their capacity factors and
8 their present form of use, so I do not know if they are
9 available for backup or not.

10 Q. The rest of the sentence continues on, they would be
11 less economic to run than a new Big Stone Unit II. Was there
12 some quantitative analysis that was done to allow you to make
13 that statement?

14 A. Yes. If you look at the existing coal-fired fleet in
15 this part of the country, the Big Stone unit will be
16 approximately 18 to 20 percent more efficient than the average
17 units in this area, so with that general basis, you know that
18 the operation of a Big Stone II Unit would be 18 to 20 percent
19 less fuel costs than the existing fleet.

20 MR. O'NEILL: No further questions at this time.

21 MR. SMITH: Ms. Stueve, do you have any
22 cross-examination of Mr. Rolfes?

23 MS. STUEVE: Yes, I do.

24 CROSS-EXAMINATION

25 BY MS. STUEVE:

1 Q. Good afternoon, thanks for coming. I have Applicants'
2 Exhibit 33, I hope I'm on the right one. Yes, the prefiled
3 rebuttal, page six, and I'm looking at lines 19, 20 and 21, and
4 my question would be based on motions just made previously to
5 take judicial notice of the draft EIS, which I believe there
6 was no objections to that. And it says in here the applicants
7 also agree to adopt the recommendations contained in the draft
8 Environmental Impact Statement concerning plant construction
9 and operation, comma, which are listed in Dr. Denney's
10 testimony at page 58, lines one through 11. My question would
11 be, this is the document that we are taking, the commission is
12 taking judicial notice of is a draft Environmental Impact
13 Statement. Would you agree or are you prepared to say that the
14 applicants also agree to adopt the recommendations contained in
15 the final Environmental Impact Statement?

16 A. To the best of my knowledge, the applicants will, will
17 comply with the recommendations in the final EIS.

18 Q. Thank you. Going to the direct testimony, on page
19 nine, Exhibit 8, line one on page nine, a question was asked,
20 are there any disadvantages to the Big Stone site as compared
21 to the others? And you mention here the nature of the water
22 supply, dependent on lake elevation.

23 A. Yes.

24 Q. Are you aware of the depth of Big Stone Lake?

25 A. I live just within feet of Big Stone Lake. It is a

1 long lake, relatively shallow by some standards. I believe the
2 average depth is 15 feet.

3 Q. Perhaps the deepest point is 15 feet, 15 to 16
4 maximum.

5 A. In that range.

6 Q. More or less.

7 A. In that range, yes.

8 Q. With many areas five feet.

9 A. Yes.

10 Q. Thank you. Again, Exhibit 8, page 11, lines six
11 through 11, can you tell us, products, byproducts produced by
12 the unit when we're talking about the fly ash that will be
13 produced will be sold into cement replacement market, the waste
14 from the wet scrubber will be a gypsum material if a market can
15 be found, this product may be sold into the wall board
16 manufacturing area, the remaining ash is expected to be
17 landfilled. Do we know or do we have a study, does Otter Tail
18 Power have a study showing these products to be safe short
19 term, long term? Do we know what type -- I stop there. I'll
20 do a follow-up.

21 A. There are people who may be better able to answer that
22 but I know there have been numerous studies done on the
23 leachate that comes from ash, the stability of the ash. It's a
24 very -- it's a subject that has been studied in great depth.

25 Q. Does Otter Tail Power have a study on this or did

1 Otter Tail Power do a study on this?

2 A. Again, Terry Graumann may be able to comment more
3 directly, but I know Otter Tail has participated in these types
4 of studies. I do not know if we have commissioned one solely
5 for our benefit.

6 Q. Thank you. And on page 12, Exhibit 8, lines nine, 10,
7 11, 12, 13, where you are talking in here about proposed
8 primary and secondary fuel sources and transportation, under
9 ARSD 20:10:22:29, and it looks like the coal will originate
10 from the Powder River Basin. Correct?

11 A. That's correct.

12 Q. That's the plan. And are you aware of when the coal
13 shortage -- well, coal shortage at the site, the delivery was
14 the problem, an article in the *Wall Street Journal*, March 15th,
15 it said something that utilities say they are paying \$70,000 a
16 month for an extra train. Did Otter Tail pay additional costs
17 to get cars to deliver coal?

18 A. As Mr. Uggerud testified, Big Stone II -- Big Stone I,
19 excuse me, Big Stone I, is going to be leasing a third train.
20 I was not involved in any of those discussions so I don't know
21 how much that cost, but there is a cost involved when leasing a
22 third train.

23 Q. And is that cost passed on to customers?

24 A. In the end the customer pays for the additional cost.

25 Q. Thank you. One more question at this time, Exhibit 8,

1 again the direct prefiled, page 23, line 10, decommissioning,
2 ARSD 20:10:22:33, do we know who pays for the decommissioning
3 or cleanup if cleanup is required for contamination, for
4 example?

5 A. I'm not an expert in this, but to the best of my
6 knowledge, the cost of decommissioning is an accrued cost, that
7 there are funds in effect set aside over the life of the unit
8 to cover that.

9 Q. And do we know where those fund come from?

10 A. Again, they will come from the rate payers in the end.

11 MS. STUEVE: Thank you, no further questions.

12 MR. SMITH: Staff?

13 CROSS-EXAMINATION

14 BY MS. CREMER:

15 Q. Good afternoon, Mr. Rolfes.

16 A. Good afternoon.

17 Q. I have a series of questions and some have been asked
18 so I'm trying to go through them to see. You talked in your
19 direct testimony about opportunity fuels. Can you just tell us
20 what that is?

21 A. An opportunity fuel is -- usually it's some waste
22 product that makes a good fuel that can be procured at a price
23 equal to or less than the primary fuel. Big Stone I has a long
24 history of burning opportunity fuels such as biomass, it burns
25 a lot of corn, it also has burned shredded tires, tire-derived

1 fuel, so it's fuel that can be procured usually cheaper than
2 the price of coal that's of equal or better environmental and
3 combustion characteristics.

4 Q. You talk about dispatch purposes for the base load and
5 that. For the supercritical pulverized coal technology, can
6 that be throttled back to, say, 300 megawatts or how is that
7 done?

8 A. Yes, it can be throttled back. And depending upon the
9 particular boiler manufacturer that's selected, the exact range
10 will depend upon the manufacturer, but the unit will certainly
11 be able to go from full load, 600 megawatts, back to 300
12 megawatts, and for a supercritical boiler that's basically
13 controlled by decreasing the steam pressure at the inlet or the
14 throttle to the turbine.

15 Q. Is that minutes' worth of work, days', how does that
16 work?

17 A. Every coal-fired unit has what's referred to as a ramp
18 rate and that's the speed at which the unit can change its load
19 characteristics. There's a normal ramp rate and an emergency
20 ramp rate and I would expect this unit to be able to change
21 load in the neighborhood of 20 to 25 megawatts per minute so
22 that if we are at 600 megawatts to get down to 500 megawatts,
23 if the ramp rate was 25 megawatts, it would take us four
24 minutes to make that change.

25 Q. The new cost estimate that you talked about in your

1 testimony, is that -- has that been provided?

2 A. No, that is not done. It's nearing completion. We
3 expect to have that in mid July.

4 Q. So will that be before or after the commission's
5 decision? You don't know because you don't know when the
6 commission's decision is I suppose.

7 A. Correct.

8 Q. Do you have a date certain at all for that or is that
9 an estimate, middle of July?

10 A. That's an estimate at this point.

11 Q. Regarding the adequacy of the water in Big Stone Lake,
12 is there a question that there's not enough water?

13 A. The project participants commissioned a study on the
14 water availability in Big Stone Lake, and our draft water
15 permit application is fashioned after the existing Big Stone I
16 Unit application, which does not allow water to be appropriated
17 when the lake falls below normal levels. Our water study
18 indicated that Big Stone Lake has more than adequate water
19 availability, but because we cannot pump when the lake is low,
20 we have to build a certain amount of drought tolerance into the
21 unit to get us through the drought periods, but on the average,
22 there is I believe nine or ten times more water than what this
23 unit would need.

24 Q. Just as an update, do you know where you are on that
25 water permit?

1 A. That hearing is the 12th and 13th of July.

2 Q. The byproducts of fly ash and the waste from the wet
3 scrubber, are there more of one of those than the other? Is
4 there a lot of one produced or do you have any idea?

5 A. I'm trying to bring this back from my memory here.
6 Mr. Graumann may remember better than me, but from my memory, I
7 think there is a little bit more of the waste product from the
8 scrubber than fly ash. I'm not 100 percent sure of that from
9 memory.

10 Q. One of the conditions staff has recently, as we have
11 been evaluating, and I don't recall if I've talked to anyone
12 from Big Stone about this matter, one of the things staff will
13 ask for as a condition is that updates will be sent in like
14 every six months or so. We don't care so much if you move a
15 handrail or a staircase in the plant, but we want to be
16 updated. Will that be a problem?

17 A. No, that would certainly be no problem.

18 Q. The updated cost estimate that you plan on submitting
19 in July, will there be revised exhibits with that or do you
20 have any idea of what form that's going to come in?

21 A. I don't know.

22 Q. Who would know that?

23 MR. GUERRERO: I guess is the question whether or not
24 Mr. Rolfes should submit that cost estimate as an exhibit in
25 this hearing?

1 Q. (BY MS. CREMER) Well, I'm just trying to figure out
2 in what form we are going to see it. Is it going to be a
3 letter saying oh, by the way, or will there be work papers?
4 I'm trying to figure out exactly what it is we will be getting
5 and how long it's going to take to look at it. But you don't
6 know.

7 A. I don't know.

8 Q. I didn't know if you had something in mind you were
9 already preparing and waiting for final numbers. No?

10 Do you have an updated cost estimate yet that you
11 can --

12 A. No, I don't.

13 Q. In your rebuttal testimony, which is Exhibit 33, you
14 talk about purchases of land or options to purchase. Do you
15 know what I'm referring to or do you need a --

16 A. No.

17 Q. Do you know the number of families that may be
18 displaced if that plant is built?

19 A. In the process there were two residents that we have
20 had conversations with. One approached us, they are a couple
21 that's retiring and wanted to move into town and they are our
22 closest neighbor, so because of their desire and the point in
23 their life that they wanted to move into town and they are our
24 closest neighbor, we felt it would be best for us to purchase
25 that residence and that has already happened and they are very

1 happy in their new house in town. We do have one other
2 resident to the south of the proposed water storage pond that
3 we have talked to and presented options to them and they have
4 gave us an option to purchase their property.

5 Q. On page four of Exhibit 33, it talks about the active
6 coal stockpile capacity would change from 28,000 tons to an
7 estimated 75,000. Can you just give me an idea, can you
8 convert that from days to tons? You know what I mean?

9 A. Uh-huh. This is off the top of my head so the
10 accuracy is not perfect, but I would -- the 75,000 tons would
11 be approximately 12 days of operation for Unit II.

12 Q. And regarding the commitment you have made on the
13 mercury cap, do you have any sort of an idea what the
14 additional cost of that would be?

15 A. Yes. The cost estimate we have now of course is
16 based on current technology and information, and the area of
17 mercury control, this is changing rapidly, so we have included
18 in our cost figures an estimated cost for controlling mercury
19 and most of that cost is an operational cost, not a capital
20 cost.

21 Q. Is there a number?

22 A. I believe the number was like one and a half million
23 dollars per year.

24 Q. And why is that operational costs and not capital
25 costs?

1 A. The nature of mercury as opposed to the other
2 pollutants is that mercury is an element. It comes in as
3 mercury and it leaves as mercury. It may have different
4 chemical composition, unlike SO₂, which is actually produced in
5 the combustion process. So with the current technology -- I
6 maybe should back up.

7 In the design of Big Stone II, we made the decision to
8 put a fabric filter baghouse and a wet scrubber, which is the
9 best combination of technology for what's referred to as
10 cobenefits for the capture of mercury. Both of those pieces of
11 equipment were part of other control strategies and I believe
12 Mr. Graumann will probably get into more detail of that. But
13 the fabric filter is there mainly for particulate control, and
14 the scrubber is there for SO₂ control, so that capital
15 equipment is there for other reasons.

16 If additional mercury control is necessary beyond what
17 those two pieces of equipment will capture, the likely course
18 would be some additive to improve the ability of the existing
19 fabric filter and scrubber to capture mercury. So it's an
20 additive that would be going with the coal or somewhere in the
21 gas stream rather than a large capital investment in another
22 piece of equipment.

23 Q. So when you were discussing that, and you may have
24 further costs, that would be required because of the change in
25 laws or regulations or something that may be imposed?

1 A. Yes.

2 Q. Is that what you are referring to?

3 MS. CREMER: That's all the questions I have. Thank
4 you.

5 MR. SMITH: Commissioners, do you have any questions
6 of Mr. Rolfes?

7 VICE-CHAIR JOHNSON: I may have one. Just a second.
8 No questions.

9 COMMISSIONER HANSON: I have one, then, if I may.

10 EXAMINATION

11 BY COMMISSIONER HANSON:

12 Q. Sir, were you here for Mr. Uggerud's testimony?

13 A. Yes, I was.

14 Q. When he was testifying, I believe it was he, correct
15 me if I attribute testimony to him that he didn't make, I
16 believe he stated that with the three train sets, that there
17 would be an increase of deliverability of coal of approximately
18 50 percent. Is that your understanding as well?

19 A. Yes.

20 Q. With the challenge that exists at the present time
21 with sufficient amount of coal delivery, and excuse me as a
22 layperson seeing what amounts to a doubling of the size of a
23 plant with 600 megawatts increase, it would seem that you would
24 need at least 100 percent increase in the deliverability of
25 coal at this time. Can you help me through that?

1 I do expect that the cost of this project will go up, but all
2 of the factors that affect the cost of this project are the
3 same factors that would affect any large construction project,
4 whether you are building wind turbines, combustion turbines or
5 Wal-Mart stores. It's the commodities and material and labor
6 that are necessary for the project.

7 Q. We have heard a lot about those increases in all those
8 different sectors and read that and I'm just curious, since
9 you've been studying this, probably more of a personal interest
10 question than perhaps relevant to this case, but we all know
11 that because of a number of factors, these raw materials have
12 gone up in terms of 2006, 2007, so on, are you projecting
13 similar rises or do you think it's going to level out once we
14 kind of get through this temporary situation now?

15 A. It varies from commodity to commodity. The one that's
16 simple to answer is we believe that labor costs will increase
17 for the whole duration of this project, more so than what we
18 have been seeing in the past.

19 CHAIRMAN SAHR: Thank you.

20 COMMISSIONER HANSON: Mr. Smith, if I could continue.

21 EXAMINATION

22 BY COMMISSIONER HANSON:

23 Q. I believe we are all -- I think I can encompass
24 everyone in the room is very concerned with the environmental
25 impacts of additional electrical generation and you were

1 speaking pertaining to the -- what you had said was the best
2 practices of having a fiber filter combined with a wet
3 scrubber. Is that an opinion or is that industry standard that
4 it is the best?

5 A. That's the standard by the EPA.

6 Q. That --

7 A. Environmental Protection Agency.

8 Q. That that is the best method?

9 A. Yes.

10 Q. However, you also added that there was the ability to
11 have additional mitigation through apparently some methodology
12 that combines an element with element to create a compound so
13 that you can better remove the mercury.

14 A. That's correct.

15 Q. Okay, so would that not be the best?

16 A. The challenge right now, mercury control is so new and
17 it's changing so fast, we do not know for sure the level of
18 control that we will get from the cobenefits. So we don't want
19 to eliminate any option at this time for the control of
20 mercury. There may be different material, different additives
21 available, in fact I'm willing to bet there will be different
22 material that's probably better and cheaper by the time this
23 unit goes into service, so we are looking at those. And part
24 of the application was a three-year period to try and test and
25 determine what's the best combination for the control of

1 mercury. I fully expect, I can't guarantee you, but I fully
2 expect that the mercury emissions from this unit will be much
3 lower than the cap that the owners are committing to.

4 Q. As we understand, there will be a reduction in the
5 amount of mercury, even as a result of still having a 600
6 megawatt added to the present, we will still see a reduction in
7 the amount of mercury; is that correct?

8 A. Not exactly. We have proposed a cap so there will be
9 no increase, even though the generation on the site is
10 increasing by 60, by over 60 percent or more than 60 percent
11 more generation at the site. So there will be no increase in
12 mercury.

13 Q. Did you happen to see or did you happen to examine
14 what you had shared with us earlier on, I don't know if you
15 were hypothesizing or not when you were talking about -- it
16 sounds like you were talking about creating a compound so that
17 you have a large -- something larger to go through a fiber
18 filter or something of that nature. Did you look at a cost
19 benefit ratio on that?

20 A. Well, it's actually not -- it's different chemistries,
21 I believe it's actually oxidizing the mercury and those are the
22 things we're evaluating and Big Stone II project has
23 participated in some of the testing to provide information for
24 that database to make those decisions.

25 Q. So you don't have that science figured out from the

1 standpoint of a cost at this time?

2 A. Not knowing what's the best option, because it will
3 change so much by the time the unit actually goes in service.
4 And because it's an additive approach so far, there's not a
5 large capital investment so the change can be made relatively
6 fast. We are not eliminating any options from consideration by
7 going this route.

8 COMMISSIONER HANSON: Thank you very much.

9 EXAMINATION

10 BY VICE-CHAIR JOHNSON:

11 Q. Mr. Rolfes, I tried to go back through your testimony.
12 I'm sure it's in there somewhere but could you remind me? You
13 described the wet scrubber and the baghouse. Would that be the
14 technology that is in place when the plant first comes on line,
15 but then if memory serves there's also three years down the
16 road you expect to reach a different threshold for mercury
17 output. Can you expand a little on that?

18 A. The baghouse SCR, selective catalytic reduction, and
19 scrubber, which Mr. Graumann will go into in more detail, will
20 be in place when the unit starts. The three years is to try
21 additives, test additives, those types of approaches to
22 determine what's the best, but the primary control devices will
23 all be in place when the unit starts.

24 Q. In Ms. Denney's rebuttal testimony, I think she
25 categorized -- I think she used the word "gamble." What was

1 your reaction to reading that rebuttal testimony and do you
2 think that's an accurate description of how you are planning to
3 deal with mercury?

4 A. I don't recall her exact testimony, so if I use this
5 wrong, but for many of the environmental regulations over the
6 years and mercury is definitely one of them, guidelines, rules,
7 regulations are often set before the exact science or I should
8 say the exact technology is known, and the industry has often
9 had to develop, invent the wheel, so to speak, for these
10 technologies, and mercury is one.

11 If you go back 20 years ago, we couldn't even measure
12 mercury and now we are trying to control it. So it's not an
13 industry or a technology that has a proven track record that
14 you can go and say, I want one of those and it comes with the
15 guarantees on it. So it's a learning process now. I have a
16 lot of confidence that we will have the right answers, have
17 that information and that the research and the vendors and the
18 technology will meet that need but today there is no guarantee.

19 Q. We spoke a bit about decommissioning earlier. And
20 it's my understanding that decommissioning costs are not
21 included in the up front capital costs of the plant, but rather
22 would be rolled into rate base at some future date as it
23 becomes a part of depreciation; is that accurate?

24 A. That's not my area of expertise but to my limited
25 knowledge, I think that's correct.

1 Q. To your knowledge, are there any drastic differences
2 in costs between the decommissioning of this facility and the
3 other alternatives that were studied by the partners?

4 A. Offhand, I cannot think of a huge difference. One of
5 the differences with Big Stone II is the large water reservoir
6 where some of the others probably would not have that large of
7 a water reservoir.

8 Q. Thank you for responding to my vague question. I
9 don't know what a huge increase is and I suspect you don't
10 either but thank you very much. That's all I have, Mr. Smith.

11 MR. SMITH: Other commissioner questions? Are you
12 ready to go, Mr. Guerrero?

13 MR. GUERRERO: Sure.

14 REDIRECT EXAMINATION

15 BY MR. GUERRERO:

16 Q. I just have a couple of follow-up questions, Mr.
17 Rolfes. Ms. Cremer asked you questions about the stockpile and
18 how that measured up with Mr. Uggerud's earlier testimony. For
19 purposes of clarifying the record, you referred to a 12-day
20 stockpile, Mr. Uggerud referred to a 30-day stockpile and I was
21 wondering if you could -- if there is any inconsistency,
22 clarify that for me.

23 A. Yes, I can see where there could be some confusion.
24 If you look at my testimony, it talks about an active coal
25 stockpile. With the design for the coal-handling facilities

1 for Big Stone II, an active stockpile would be a stockpile that
2 would be available for use without putting mobile equipment
3 into the pile to move coal with a bulldozer or a scraper, and
4 the 12 days, my rough math, was from the active pile that could
5 be brought back in and used by the start of a conveyor rather
6 than the start of a bulldozer. Mr. Uggerud referred to the
7 dead stockpile, in our terminology, rather than active where
8 you need to put mobile equipment to recover that coal.

9 Q. Of the two active and dead, what's the total number of
10 days that you would have?

11 A. This is a judgment call by the owners, past
12 experience, I would expect that they would have a 30-day supply
13 for both units.

14 Q. Mr. O'Neill asked you questions about CO2 regulatory
15 costs, and I think in one of your answers you indicated that
16 the project didn't evaluate CO2 regulatory costs. Mr. Rolfes,
17 are you familiar with the study that was sponsored by the Burns
18 & McDonnell?

19 A. Yes.

20 Q. Do you know whether or not that study, and I am
21 specifically referring to Exhibit 23-A that's in the record,
22 whether or not that study attempted to address CO2 regulatory
23 costs in some fashion?

24 A. To the best of my knowledge, it did.

25 MR. GUERRERO: Mr. Hearing Examiner, I have no other

1 questions.

2 MR. SMITH: Pardon me?

3 MR. GUERRERO: No other questions. Thank you.

4 MR. SMITH: We have received word they think there
5 might be some problem with the -- with the court reporter's
6 computer and transmitting. Can we go off the record for just a
7 second?

8 (Discussion held off the record.)

9 MR. SMITH: Pardon me for that interruption. We had a
10 potential problem apparently with the computer network and so
11 hopefully we are going to address that at the next recess we
12 take. Where were we? Are you done?

13 MR. GUERRERO: I finished -- Mr. Guerrero -- I had
14 finished my redirect, I have no further questions of Mr.
15 Rolfes.

16 MR. SMITH: Is there any recross by intervenors?

17 MR. O'NEILL: No.

18 MS. STUEVE: No.

19 MS. CREMER: Staff has none.

20 MR. SMITH: Any last questions by commissioners?

21 VICE-CHAIR JOHNSON: No, sir.

22 MR. SMITH: You are excused. Thank you. Who's next?

23 MR. GUERRERO: At this time applicants would call to
24 the stand Mr. Terry Graumann.

25 MR. SMITH: He's going to be on a long time would you

1 suspect, longer than Mr. Rolfes?

2 MR. GUERRERO: I'm not sure. I wouldn't expect a
3 whole lot longer.

4 MR. SMITH: Okay. I tell you what, the Bureau of
5 Information and Technology just wanted some idea of when the
6 next break would occur and I thought I'd try to get an
7 estimate. What do you think, about an hour total for him?

8 MR. GUERRERO: I would imagine max.
9 Thereupon,

10 TERRY GRAUMANN,
11 called as a witness, being first duly sworn as hereinafter
12 certified, testified as follows:

13 DIRECT EXAMINATION

14 BY MR. GUERRERO:

15 Q. Mr. Graumann, could you state your full name for the
16 record, please?

17 A. Terry Marvin Graumann.

18 Q. By whom are you employed?

19 A. I'm employed by Otter Tail Power Company.

20 Q. In what capacity?

21 A. I am the manager of environmental services.

22 Q. What is your employment history?

23 A. I began work with Otter Tail Power Company in October
24 of 1973 in the area of environmental affairs. I've been in a
25 couple of different positions during that time and was named

1 manager of that department in 1994.

2 Q. Thank you. What about your educational experience?

3 A. I have a bachelor of arts degree in natural sciences
4 from Tabor College in Kansas.

5 Q. Mr. Graumann, I believe there should be up there on
6 the table in front of you what's been marked as Applicants'
7 Exhibit No. 16 and Applicants' Exhibit No. 34. Do you have
8 those documents?

9 A. Yes, I do.

10 Q. Could you tell the commission what those documents
11 are?

12 A. Applicants' Exhibit 16 is my direct testimony,
13 Applicants' Exhibit 34 is my rebuttal testimony.

14 Q. And with respect to Exhibits 16 and 34, do you have
15 any corrections or clarifications to make today?

16 A. Yes, I do.

17 Q. Could you tell us what those are?

18 A. In the Applicants' Exhibit 16 on page six, line 15, it
19 states that Western selected a company called Enser to fill the
20 role of the third party environmental contractor --

21 Q. I'm going to object -- I'm going to interrupt for a
22 second, Mr. Graumann. Let's let people get there and give it
23 to us again.

24 A. Page six, line 15 of my direct testimony.

25 Q. Go ahead, thanks.

1 A. It states in my testimony, which was correct at the
2 time when it was written, that Western selected Enser to fill
3 the role of the third party environmental contractor. Western
4 has now selected R.W. Beck to complete that work.

5 Q. Thank you. Any other corrections?

6 A. Yes. There is also one more and that is on page
7 seven of the rebuttal testimony.

8 Q. That's Exhibit 34?

9 A. Exhibit No. 34, line 16. It talks about the 30-day
10 extension of a comment period and there was a typographical
11 error, it states that they were due on July 26th, it should be
12 June 26th.

13 Q. Thank you, Mr. Graumann. Any other corrections with
14 respect to Exhibits 16 and 34?

15 A. There are none.

16 Q. Given those corrections, if I were to ask you the same
17 questions today that are outlined in 16 and 34, would your
18 answers be the same?

19 A. They would be.

20 MR. GUERRERO: And I would move at this time
21 Applicants' Exhibits 16 and 34.

22 MR. SMITH: Objection from any party?

23 MS. STUEVE: No objection.

24 MS. CREMER: No objection.

25 MR. SMITH: Exhibit 16 -- Applicants' Exhibits 16 and

1 34 are received into evidence.

2 EXHIBITS:

3 (Applicants' Exhibit Nos. 16 and 34 received into
4 evidence.)

5 Q. (BY MR. GUERRERO) Thank you, Mr. Hearing Examiner.
6 Mr. Graumann, do you have a summary with you today?

7 A. Yes, I do.

8 Q. Could you please walk us through that?

9 A. I will. The purpose of my testimony is to provide a
10 review of the permit processes and the emission control
11 technologies for the Big Stone II project. In addition to this
12 proceeding, there are a number of other reviews and permits
13 that are going to be required as a part of the approval
14 process.

15 First of all, there is the federal Environmental
16 Impact Statement. The federal Environmental Impact Statement
17 process is triggered by a nonexempt action by a federal agency
18 and in this particular case, there's an interconnection request
19 with the Western Area Power Administration, there will be a
20 request from the Rural Utility Services for financing on behalf
21 of one of the co-owners, and last but not least there will be a
22 need for a Section 404 permit from the Corps of Engineers. The
23 Western Area Power Administration is the lead agency for
24 purposes of developing the EIS. The RUS and the Corps of
25 Engineers are cooperating agencies.

1 The draft EIS is up for public comment currently and
2 the comments are slated to close I believe on July 3rd. The
3 record of decision is scheduled for December 2006. The PSD, or
4 prevention of significant deterioration air quality
5 construction permit, is under consideration by the South Dakota
6 department of environment and natural resources air quality
7 group. If issued, that permit would allow construction of the
8 Big Stone plant within the air quality rules.

9 The water appropriations permit is currently under
10 consideration by the South Dakota DENR water rights group and
11 if that permit were approved, it would allow the additional
12 appropriation and water storage as required by Big Stone II.
13 That comment period is slated, excuse me, the public hearing as
14 Mark Rolfes or Mr. Rolfes mentioned earlier, is scheduled for
15 July 12th and 13th before the water management board.

16 The solid waste permit allows for on-site disposal of
17 and management of waste at the Big Stone plant property. That
18 permit was issued by the South Dakota DENR on June 20th of
19 2006.

20 With respect to air quality, with the Big Stone II
21 project, the sulphur dioxide would be reduced to approximately
22 one-seventh of current conditions. There would be no increase
23 in nitrogen oxides. Particulates would be removed at about the
24 99.9 percent removal rate, and recently the co-owners have
25 committed to a no-net-increase in site emissions as compared to

1 2004 emissions of a cap of mercury for 189 pounds per year.
2 That would be applicable within three years of commercial
3 operation, which allows the opportunity to test and implement
4 commercially-available, technically-feasible control
5 technologies.

6 In addition to that commitment, the project would also
7 be required to comply with the Clean Air Mercury Rule. What
8 that means is is that the Big Stone II site would be required
9 to have one allowance for each ounce of mercury emitted. What
10 that in effect does is it encourages greater on-site controls
11 rather than the purchase of additional allowances. All of
12 these provisions would be enforced by the South Dakota
13 department of environment and natural resources.

14 The emission control technologies include first of all
15 the supercritical boiler, which would reduce the amount of
16 emissions per kilowatt hour simply because of its efficiency,
17 higher efficiency as compared to other commercially-available
18 boiler coal-fired units. The selection and use of the most
19 effective, we have selected and will use the most effective
20 commercially-available technologies for emissions control for
21 all air pollutants, including the particulate matter, sulphur
22 dioxide and nitrogen oxides and mercury.

23 The water appropriations permit requests an increase
24 in the amount of water that's appropriated but with no change
25 in either pumping rates or seasonal limitations embodied in the

1 existing permit. What that essentially means is that the pumps
2 that are currently located at Big Stone Lake would be running
3 more hours but they will only be doing so as long as the
4 conditions of the existing permit with respect to lake level
5 are met.

6 Big Stone II has adopted the site water management
7 plan that will reuse water to the maximum possible extent.
8 That will require the addition of a makeup water storage pond,
9 cooling towers, cooling tower blow-down pond, and one or
10 possibly two brine concentrators. With this management plan,
11 we will be able to maintain a zero discharge of processed water
12 to natural water bodies, which is currently the design process
13 that Big Stone I has been operating at for well over 30 years.

14 Big Stone II facility would use the existing disposal
15 site that is currently regulated by the existing solid waste
16 disposal site permit. The application for permit renewal
17 included the Big Stone II waste streams including the fly ash,
18 bottom ash and gypsum. The permit was reissued on June 20th,
19 2006 following public notice and a thorough review by the South
20 Dakota DENR.

21 In summary, Big Stone II will meet or exceed all air
22 quality standards using the most effective
23 commercially-available emission control technology. We will be
24 going above and beyond the requirements to fulfill its
25 commitment to protect the environment and we will continue to

1 be a good neighbor and asset to the state of South Dakota.

2 MR. GUERRERO: Thank you, Mr. Graumann. With that,
3 applicants would tender Mr. Graumann for questions.

4 MR. SMITH: Intervenors, are you set? Take a minute.

5 CROSS-EXAMINATION

6 BY MS. GOODPASTER:

7 Q. Good afternoon, Mr. Graumann.

8 A. Good afternoon.

9 Q. We have talked about some of the mercury issues
10 already this morning and this afternoon, but I do want to go
11 back to those for a little bit. Your June 9 testimony as you
12 have summarized discusses a new commitment that applicants are
13 prepared to make regarding actual emissions of mercury from
14 both Unit I and II, correct?

15 A. That's correct.

16 Q. And that commitment is to not make mercury emissions
17 worse after -- if the schedule that Mr. Rolfes set out of
18 commercial operation in spring 2011, that is the working
19 assumption, it wouldn't get worse starting in about spring
20 2014.

21 MR. GUERRERO: I guess I would ask just ask for a
22 clarificaiton of what she means by "worse."

23 MS. GOODPASTER: More mercury emissions.

24 MR. SMITH: I think that's clear enough. Can you go
25 ahead and answer?

1 A. That's certainly one possible characterization. But
2 we could also say that those reductions could occur earlier
3 than that, that cap would be met in 2012 or '13, we just need
4 to allow ourselves three years of time to be able to do the
5 evaluation that's necessary, not necessarily saying that we
6 would take that entire three-year period.

7 Q. (BY MS. GOODPASTER) Thank you for that clarification
8 and I would just further ask that that means that you aren't
9 ready to commit -- by definition, you are not ready to commit,
10 though, until spring 2014.

11 A. That would be correct.

12 Q. And I believe Mr. Rolfes already testified that the
13 commitment that has been set forth is not based on any design
14 changes that have been proposed for the plant.

15 A. That is also correct.

16 Q. And he talked about the fabric filter and wet scrubber
17 and he talked about how that is an operating standard from EPA,
18 a standard from EPA. Did you hear that reference earlier?

19 A. Yes, I heard that reference.

20 Q. Do you know what standard he is referring to?

21 A. The reference to the wet scrubber fabric filter
22 technology appears in a memo that EPA has published that talks
23 about a best demonstrated technology for subbituminous coals.

24 MR. GUERRERO: Let me interrupt. Mr. Graumann, could
25 you pull the microphone a little bit closer.

1 A. Excuse me.

2 Q. (BY MS. GOODPASTER) Could you tell me the date of
3 that memo, approximately?

4 A. I would have to consult that memo to be able to find
5 the date.

6 Q. Would it be possible for you to bring it into the
7 proceeding at some point during this week?

8 A. It would be possible.

9 Q. Could I ask that you do so?

10 A. I will do so.

11 Q. Thank you. Now, assuming that -- you mentioned that
12 it was the best demonstrated combination according to EPA. If
13 it's the best demonstrated combination for cobenefit reduction
14 of mercury, what is the source of the uncertainty about whether
15 you would be able to meet your commitment to 189 pounds per
16 year using that technology?

17 A. The source of that uncertainty is to whether or not
18 that technology would in fact on its own get us to the 189
19 pounds absent any other technologies that might be able to
20 essentially piggyback on that technology.

21 Q. I understand that, except that if it's the best
22 demonstrated cobenefit technology, doesn't that mean it's been
23 demonstrated somewhere so that we would know how effective it
24 would be by itself?

25 A. One of the things that we have to consider with

1 respect to mercury and that is that mercury doesn't
2 necessarily -- mercury doesn't necessarily reflect in the same
3 removal rates at all power plants under all conditions and it
4 may differ so that it might be the best demonstrated
5 technology, but whether or not that technology will perform
6 equally at all locations, we won't be able to have an answer to
7 that until that technology would be essentially up and
8 operating.

9 Q. So we don't have access to a demonstration of the
10 effectiveness of this technology at a plant like Big Stone II
11 and I together?

12 A. I believe my testimony does reference some work and
13 some studies that were done at the W.A. Parish 8 unit and the
14 W.A. Parish 8 unit is equipped with a SCR, a fabric filter and
15 a wet scrubber.

16 Q. And is your testimony that that is a demonstration of
17 the combination of technologies that you are proposing but it's
18 not a demonstration upon which you are confident that you are
19 going to get the same results here?

20 A. I need to clarify that, if I may.

21 Q. Sure.

22 A. When EPA made the statement of best demonstrated
23 technology with respect to the wet scrubber and spray dryer
24 combination, they were using the ICR data, the information
25 collection data that EPA gathered on all -- well, example data

1 from mercury emission sources in 1999, and at that particular
2 time, they concluded that that technology represented the best
3 technology, demonstrated technology for the cobenefits of
4 mercury removal.

5 The W.A. Parish unit test was a test that participants
6 funded, at least the Big Stone II participants partially funded
7 to help clarify mercury removal on a unit that was equipped
8 with control equipment similar to what we would expect to use
9 for Big Stone II.

10 Q. So the W.A. Parish unit is not sufficient, the
11 performance of that is not sufficient for you today to say that
12 the same equipment at Big Stone II will have X results for
13 mercury emission?

14 A. That is correct.

15 Q. So we don't know how much mercury emissions are going
16 to be at commercial operation, they could be higher than 2004
17 for either Unit I or II.

18 A. That is correct.

19 Q. Isn't it possible that keeping your commitment to cap
20 mercury emissions would increase the operating costs I believe
21 Mr. Rolfes clarified earlier of the plant?

22 A. I suspect it's possible, but not necessarily likely,
23 and if may I explain?

24 Q. Sure.

25 A. One of the things that we need to consider with

1 respect to mercury is that, one, we either have an allowance
2 for each ounce of mercury we emit, or two, we control the
3 mercury to within the number of allowances that are allocated
4 to the units. And as Mr. Rolfes mentioned, mercury allowances
5 are included as a part of the project cost. Now we are looking
6 at making reductions rather than the possibility of purchasing
7 allowances.

8 Q. The mercury allowances that were examined and
9 included, could you put a price tag on those, what was assumed?

10 A. I don't recall exactly right offhand what that number
11 was.

12 Q. Could you tell me where in the record I could go to
13 check?

14 A. It would be included in the Burns & McDonnell Phase
15 One Report. I believe there's a table there that identifies
16 all of the allowance costs that were considered as a part of
17 that evaluation.

18 Q. Now, I'm going to go back to the same question again,
19 though, when I was asking you that it's possible that keeping
20 your commitment to the emissions cap could increase the
21 operating costs, you then told me that there's -- you talked
22 about the allowance option the company has, but for the
23 purpose -- I understand that you have an option under the Clean
24 Air Mercury Rule to use allowances, but for your commitment to
25 cap at 189, that's for an actual emissions cap, so we're not

1 talking about allowances in that context.

2 A. That is correct.

3 Q. So the other kind of operating costs that we would be
4 talking about in that context would be the ideas that Mr.
5 Rolfes suggested about possible additives.

6 A. That is correct.

7 Q. And if the operating costs were increased, wouldn't
8 that affect the dispatch order, the dispatchability, that's
9 probably the wrong word to say the dispatchability, it would be
10 when it would be dispatched because it would have a different
11 operating cost than we otherwise assumed.

12 A. There would be a different operating cost, but we are
13 not expecting that those costs would be significant in terms of
14 major dollars. Like the additives, for example, you're talking
15 about dollars for purchasing additives, but on the other hand,
16 there's not a whole lot of capital costs to go along with that
17 and obviously that is two different things, but the additive
18 costs we are not expecting to change the pricing of the unit
19 significantly.

20 Q. Just for purposes of my own clarification here, the
21 Phase One Report, the Burns & McDonnell report you mentioned,
22 that was evaluating different allowance costs, but is there an
23 evaluation in the record also of the different operating costs
24 that you are referring to now about the additives?

25 A. No, there's not.

1 Q. So we don't know how that impacts the operating costs
2 for the plant in this record versus, for example, other
3 alternatives.

4 A. That's correct.

5 Q. Is it possible that meeting your commitment to reduce
6 mercury emissions would affect the capacity factor of either
7 Big Stone Unit I or Big Stone Unit II, especially in the three
8 years prior to 2014? I guess there is no commitment prior to
9 2014 so I guess meeting the commitment starting in spring 2014
10 assuming the schedule that we were discussing earlier.

11 A. Based on what I see and know of the industry right
12 now, I think that would be highly unlikely.

13 Q. But it's possible?

14 A. It's possible, but remote.

15 Q. If the Big Stone II or I capacity factor went down in
16 an effort to reduce mercury, in essence you would be cutting
17 back production to meet the commitment, would that change the
18 relative economics of alternatives to Big Stone II?

19 MR. GUERRERO: I guess I would object. Is that a
20 hypothetical question you're asking?

21 MS. GOODPASTER: I'm asking -- he has testified that
22 it is possible that the capacity factor could go down and I'm
23 asking whether he agrees with me that that would change the
24 relative economics of Big Stone II as compared with
25 alternatives.

1 MR. GUERRERO: Mr. Graumann is an environmental
2 expert, I'm not sure that he would be considered an economic
3 expert with respect to the cost of this facility. Objection,
4 foundation.

5 MR. SMITH: I'm going to overrule it. If he doesn't
6 know -- if you don't know the answer, then say I don't know.

7 A. I don't know.

8 MS. GOODPASTER: Thank you. Those are all the
9 questions I have.

10 MR. SMITH: Ms. Stueve?

11 MS. STUEVE: Yes, thank you.

12 CROSS-EXAMINATION

13 BY MS. STUEVE:

14 Q. Good afternoon.

15 A. Good afternoon.

16 Q. We meet again.

17 A. Yes, we do.

18 Q. Glad you're here, appreciate your testimony. First
19 looking at Exhibit 16, the direct testimony, on page six, was
20 there any specific reason why a third party environmental
21 contractor aside from the original Enser was selected to
22 complete the work?

23 A. I guess I really can't answer that question. That
24 decision and action is in the hands of Western, those folks are
25 the folks that make the decision as to and approve of the third

1 party contractor.

2 Q. And in reading the draft EIS, the little time I've had
3 to do it, it was mentioned in there something that Western,
4 WAPA, Western Area Power Administrators, do have an interest in
5 this project which was one reason why Enser was brought on, and
6 yet WAPA was, is the supervising -- or supervising the
7 Environmental Impact Statement?

8 A. I guess I wouldn't characterize the process in quite
9 that way.

10 Q. And how would you characterize it?

11 A. Well, Western Area Power Administration is a federal
12 agency under the Department of Energy and as a part of the
13 transmission processes, there was a request to interconnect at
14 two of Western Area Power Association's substations. Because
15 that approval of that connection needs to be made by Western as
16 an arm of the federal government, they need to initiate the
17 Environmental Impact Statement. So the direct reason that
18 Western is involved is because of the interconnection. In
19 absence of that, Western would not be involved as a part of the
20 EIS process.

21 Q. And will Western in any way have financial benefit to
22 interconnect?

23 A. I guess I really can't answer that question. Again,
24 it's a part of the federal process that the project does not
25 have control over.

1 Q. Thank you. In the prefiled rebuttal testimony,
2 Applicants' Exhibit 34 -- well, first I could ask you for the
3 record, because I know you gave testimony in Milbank September
4 13th, 15th, last September, 2005, we hear the numbers 189 for
5 the new voluntary commitment at 189, no more or no less than
6 the 2004. What happens in -- for the record, can you say what
7 the numbers will look like under Clean Air Mercury Rule in 2012
8 and 2018?

9 A. Well, with respect to 2012, the mercury emissions
10 will, one, depend upon the mercury in the coal, the operating
11 levels and the number of hours of operation for both Big Stone
12 I and Big Stone II, and where we are in the process of
13 evaluating the suitability of the various possible control
14 technologies, so that in essence, that will be a part of our
15 evaluation process. We may very well be at or less than 189
16 pounds at that particular time, but again, we need to have that
17 three-year period of time to be able to do the evaluation.

18 Q. And do you have the exact numbers of the South Dakota
19 budget in the year 2012 and 2018 for mercury emissions?

20 A. What I can say is this, is that the South Dakota
21 budget for the whole state beginning in 2010 is 144 pounds.

22 MR. GUERRERO: Could you clarify which budget we're
23 talking about?

24 A. Excuse me, that is the mercury budget under the Clean
25 Air Mercury Rule. The South Dakota mercury budget for 2018 is

1 58 pounds.

2 Q. (BY MS. STUEVE) In 2018?

3 A. In 2018.

4 Q. So 2004 we're talking about the co-owners' commitment
5 recently made to cap at 189 pounds and the budget South Dakota
6 under Clean Air Mercury Rule in 2012 will be 158 pounds, in
7 2018 44 pounds or no?

8 A. No. In 2010, there will be 144 pounds, in 2018 that
9 mercury budget will be 58 pounds.

10 Q. Okay. Thank you. And do we have any idea of how we
11 are going to get from 189 down to 58, if co-owners or Big Stone
12 II is allotted all the mercury allowances for the state of
13 South Dakota?

14 A. We don't have any specific answer at this particular
15 time, but we know that there is an awful lot of ongoing
16 research that's going on nationwide. This issue of mercury
17 reductions following the implementation of the camera rule is
18 not an issue that's unique to the Big Stone site. It's an
19 issue that needs to be addressed on a nationwide basis because
20 the total number of mercury allowances that will be allocated
21 out proportionately to each of the states is 38 tons in 2010
22 and then that of course drops to 15 tons in 2018. So this is
23 going to be an issue that I can assure you that folks are going
24 to be spend a lot of time and research dollars between now and
25 2018 to essentially bring the whole industry down to

1 significantly lower levels than we are right now.

2 Q. Thank you. Also on page 2 of Applicants' Exhibit 34,
3 I see in here you have co-owners, and I'm assuming you are
4 talking co-owners, or correct me if it's Otter Tail, will have
5 ongoing incentives to reduce mercury emissions because of
6 purchasing the allowances.

7 MR. GUERRERO: Could you direct us to which line you
8 are looking at, Ms. Stueve?

9 MS. STUEVE: I'm sorry, line 15 and 16 on page two.

10 MR. GUERRERO: Thank you.

11 Q. (BY MS. STUEVE) Is that co-owners as a whole or is
12 that Otter Tail?

13 A. Let me look at the context.

14 Q. It's Exhibit 34, page 2, lines 15 and 16.

15 A. In this broad context it would be the co-owners as a
16 whole.

17 Q. Okay. And question on that, Otter Tail also has a
18 facility in Minnesota that with the new legislation recently
19 passed this last session will be called on to reduce mercury
20 emissions.

21 MR. GUERRERO: I guess I would object. The question
22 is misleading and I think assumes facts not in evidence and I
23 believe it's actually an incorrect characterization of the
24 legislation.

25 MR. SMITH: Can you read back the question, please?

1 (Whereupon, the Court Reporter read back the requested
2 portion.)

3 MR. GUERRERO: The objection is that the legislation
4 Ms. Stueve is referring to does not address, but I'll let Mr.
5 Graumann answer that. So the question is misleading. I would
6 object.

7 MR. SMITH: I have absolutely no idea what Minnesota's
8 legislation says. So can you ask it --

9 MS. STUEVE: I will rephrase, okay.

10 Q. (BY MS. STUEVE) Would it be possible for Otter Tail,
11 Big Stone Plant II to purchase emission allocations on mercury
12 from Minnesota, if they are available?

13 A. It would be possible.

14 Q. Okay. Thank you. Applicants' Exhibit 34, page 3,
15 lines 6, 7 and 8, because the total emissions of mercury from
16 Big Stone site will not increase, no additional impacts should
17 occur. Would you still say that if we were considering
18 cumulative impacts?

19 MR. GUERRERO: I guess I would object. The question
20 is vague and I'm not sure what cumulative impacts means in the
21 context of that question.

22 MR. SMITH: Are you talking impacts from Units I and
23 II?

24 Q. (BY MS. STUEVE) Impacts, cumulative impacts of
25 mercury with Units I and II, if the proposed plant goes

1 through, you say in here that no additional impacts should
2 occur. The context of it, the co-owners have committed to keep
3 mercury emissions from both units at the level they are today
4 from Unit I, 189, correct? Because a total emissions of
5 mercury from Big Stone site will not increase, no additional
6 impacts should occur. Were cumulative impacts considered,
7 meaning that once mercury enters the environment, it is
8 considered a bioaccumulative, it does not just disappear?

9 A. With respect to that question, if I might elaborate.

10 Q. Please.

11 A. Mercury -- the utilities are not the only source of
12 mercury where it's emitted to the environment. There are
13 natural resources, there is the reemission of mercury from
14 sources that have occurred years ago, legacy mercury as it's
15 called. For purposes of this document, there was no specific
16 evaluation of mercury on the cumulative impacts for purposes of
17 this study. However, EPA in its regulation of mercury has
18 taken a look at mercury and its impacts and they have made an
19 assessment as to what would be appropriate in terms of mercury
20 reductions and mercury controls from coal-fired units, and
21 included in that evaluation was an evaluation of health impacts
22 and environmental impacts associated with the continued
23 emission of mercury. So to that extent, the cumulative impacts
24 have been evaluated as a part of the process.

25 Q. Evaluated also within this project, the health and

1 cumulative impacts?

2 A. They were not specifically evaluated as a part of this
3 project.

4 Q. Thank you. And same page down to lines 19, 20, 21,
5 22, you cite the 19 -- intervenors cited the 1990 study mercury
6 report to Congress, and you say here EPA subsequently found,
7 based on computer modeling, that due to the reductions of
8 mercury emissions resulting from these other programs, mercury
9 emissions will not result in, quote, unquote, hot spots. Do
10 you stand by that statement?

11 A. I believe I -- I do not believe that's my statement.
12 That was a statement that was taken -- essentially the
13 information was taken from the Federal Register.

14 Q. So you are citing this study here?

15 A. I'm citing the EPA information.

16 Q. Do you believe there's hot spots attributable to
17 utilities, emissions of mercury?

18 A. Do I personally?

19 Q. Uh-huh.

20 A. I guess I'm not in a good position to be able to
21 answer that question to say that none exist.

22 Q. Right. Are you aware of the office of inspector
23 general from the Environmental Protection Agency, they put out
24 a report May 15th, 2006 questioning and looking at the
25 potential for mercury hot spots attributable to utilities?

1 MR. GUERRERO: Is the question whether he's familiar?

2 Q. (BY MS. STUEVE) Are you familiar with this document?

3 A. I may have seen it. There's a vast amount of
4 information in the press on mercury.

5 Q. And would there be a reason why we do not have within
6 the project application, testimony, exhaustive study of sorts
7 on the environment, human health, fish, tissue?

8 MR. GUERRERO: I guess I would object. Assumes facts
9 not in evidence and seems to be a little bit argumentative. We
10 would suggest that there is information in the record that
11 addresses a lot of environmental issues, but maybe --

12 MR. SMITH: Objection sustained and if you want to get
13 at something like that, you are going to have to phrase it
14 significantly different.

15 MS. STUEVE: I will have to think on that one. I will
16 close for now.

17 MR. SMITH: Thank you. Staff, are you ready to go?

18 MS. CREMER: I am.

19 CROSS-EXAMINATION

20 BY MS. CREMER:

21 Q. Good afternoon, how are you?

22 A. Just fine, thank you.

23 Q. This is going to be a lot of jumping around because I
24 have gotten questions eliminated and that, so if I confuse you,
25 let me know. In your rebuttal testimony, which is 34, on

1 page -- the question at the bottom of page 2 and then the
2 answer at the top of page 3 where -- the question is, what are
3 the potential adverse environmental impacts expected from the
4 emission of mercury? Your answer is none. Is that correct?

5 A. That's correct.

6 Q. My question there is if there truly is no adverse
7 environmental impact, then why is the EPA trying to reduce
8 mercury emissions?

9 A. The answer of none was responded to with respect to
10 the changes of the emissions of mercury following construction
11 of Big Stone II. And since we were not increasing as a result
12 of this commitment the emissions of mercury following
13 construction of Big Stone II from what they historically had
14 been for Big Stone I, we responded or I responded none to that
15 particular question.

16 Q. It's not that mercury emissions don't have any adverse
17 environmental impact, you were just referring specifically to
18 Big Stone II.

19 A. That is correct.

20 Q. Okay. On that same page 3, line 13, you refer to see
21 70 Federal Register 15994. Can you be more specific as to
22 which -- is that like clean air rule or. . . If you need to
23 look that up and get back to us later, that's fine.

24 A. I can look that up and get back to you. That's a
25 citation to the March 29th, 2005 Federal Register, page 15994.

1 Q. We just had trouble locating, we weren't narrowing it
2 down.

3 A. Okay.

4 Q. Do you know, were the federal mercury rules finalized
5 on May 31, 2006?

6 A. May I explain my answer?

7 Q. Sure.

8 A. Mercury rules have gone through kind of a wild
9 approval process. The Clean Air Mercury Rules were first
10 published on May 18th, 2005 and they have been called the Clean
11 Air Mercury Rule. On October 28th, 2005 EPA announced a
12 reconsideration of those rules, where they evaluated only
13 certain portions of Clean Air Mercury Rule that had been
14 originally published on May 18th and from a practical
15 standpoint, those provisions that they were reevaluating didn't
16 substantively affect the activities that we were looking at
17 with respect to Big Stone II.

18 On June 9th of 2006, within a couple of weeks, EPA
19 announced their decision on that reconsideration, which is
20 essentially to, with some minor changes, to maintain the rule
21 as they had originally -- excuse me, as they originally
22 published it with the revisions in October.

23 So there was no action by EPA that I am aware of on
24 May 31st of 2006, it might have been that they signed the
25 document but that document wasn't published in the Federal

1 Register until I believe it was June 9th of 2006 and that was
2 the result of the reconsideration of the mercury rule.

3 Q. So they were finalized then at that point, in your
4 mind?

5 A. Well, in my mind they were finalized way back in May
6 of 2005. They have made some adjustments since then.

7 Q. Okay. And Ms. Goodpaster asked you about this but I'm
8 not sure I'm still clear so I'm going to take another shot at
9 it. Mr. Rolfes testified that mercury controls will likely be
10 achieved by using chemical additives, and that would be an
11 increase in operating costs rather than capital costs. Is that
12 your understanding of what he told us this morning or this
13 afternoon when I asked him about operating versus capital?

14 A. It is, and that's a correct statement.

15 Q. Okay. Then in Exhibit 34 on page 4, it would be lines
16 7 and 8, you state that several million dollars in capital
17 costs and annual operating costs, so can you clarify what
18 capital equipment you're talking about in that statement?

19 A. The capital costs would be incurred to inject the
20 additives into the system, if in fact those proved necessary as
21 a result of the ongoing evaluation. It might be tanks, spray
22 nozzles, some piping, to be able to transfer the additives from
23 whatever storage vessel it might be to either the coal or into
24 the scrubber or into some other -- into the fabric filter, some
25 other location in the system. It is not major in the sense

1 that it would be equal to another SCR or a scrubber or anything
2 like that. It would be some dollars associated with the
3 storage and handling equipment for those materials that would
4 need to be added to the system and then the operating costs,
5 the ongoing operating costs would be for the reagents
6 themselves, the materials themselves, whatever they might be.

7 Q. Are there any technologies besides additives when you
8 talk about additives as additional control technology?

9 A. There are some other control technologies that are
10 being researched as a part of these -- as a part of the mercury
11 removal processes. Typically the way that those projects are
12 proceeding is that they would in some way change the chemical
13 form of the mercury so that makes it more amenable for removal
14 by existing control technologies. One technology that comes to
15 mind is a technology called MerCAP, which oxidizes the mercury
16 or collects it in some other way, but there are some other
17 technologies that are being looked at as a part of the mercury
18 removal process.

19 Q. And are any of those under consideration with the Big
20 Stone II project?

21 A. We would be looking at those as well and evaluating
22 those as well as the information on those technologies develop.

23 Q. You were giving us various dates. Did you give us a
24 date on that air quality permit, the status of that?

25 A. The public comment period on that air quality permit

1 has expired today. We have, and I may have forgotten to
2 mention this, but we have applied for a revised application
3 that would have included some of the minor sources that came to
4 light as a part of the ongoing design of the facility, a couple
5 of diesel fire pumps, for example, were included in the revised
6 application.

7 Q. In Exhibit 16, which is your direct, and you don't
8 really necessarily need to flip to it. If you do, I can give
9 you page and line, but you discuss different mercury emission
10 reduction technology research projects and I think you talked
11 about that with Ms. Goodpaster. My question is, are you
12 involved in any research projects that you haven't discussed
13 yet?

14 A. I believe my testimony included our involvement in the
15 Center For Air Toxic Metals, it mentioned the work that we were
16 going -- the ongoing work with the North Dakota units on
17 lignite-fired units, the W.A. Parish. I can't think of any
18 other tech -- any other projects that we are currently involved
19 in that I hadn't already mentioned.

20 Q. Okay. And then in your summary, you talked about, and
21 these are notes so I might not be right, SO2 will be reduced to
22 one-seventh of the current emissions. Is that what you had
23 said?

24 A. That's correct.

25 Q. If in the DENR draft air permit that you talked about

1 the plant cap is equal to the current Big Stone II SO2
2 emissions, how does the math work there?

3 A. The math works because of the difference between what
4 could be or what we expect to be reflected in our permit as
5 compared to where we expect to operate, and like most utility
6 units, we don't necessarily operate up at the permit limits and
7 so we fully expect to have our mercury emissions from both Big
8 Stone I and Big Stone II in the neighborhood of a couple of
9 thousand tons per year, even though our PSD permit, which is
10 based on the average of the two years emissions of 2003 to 2004
11 would be reflected in the permit. So there's a difference
12 between what the permit might require and where we expect to
13 operate.

14 Q. What is the permit, do you know what it's permitted
15 at, the number?

16 A. I believe the permit limit that would be a part of the
17 application is like 13,278 tons per year.

18 MS. CREMER: That's all I have, thank you.

19 MR. SMITH: Do commissioners have questions of Mr.
20 Graumann?

21 CHAIRMAN SAHR: I have none at this time.

22 EXAMINATION

23 BY VICE-CHAIR JOHNSON:

24 Q. I just want to make sure that I've got this in
25 context, Mr. Graumann. The national budget for mercury in 2010

1 will be 38 tons, in 2018 it will be 15 tons. I seem to
2 remember having read something, whether it's in in your
3 testimony, that current mercury emissions in the country will
4 be somewhere around 48 tons. Do you know if that's accurate?

5 A. That's as good a number as any.

6 VICE-CHAIR JOHNSON: Thanks.

7 EXAMINATION

8 BY COMMISSIONER HANSON:

9 Q. Mr. Graumann, could you tell us what considerations
10 you gave to the possibility of any type of carbon sequestration
11 with this plant?

12 A. Thus far we haven't considered that as a part of the
13 project.

14 Q. Have you examined it at all, the potential for it?

15 A. As a part of this project, no.

16 Q. Have you examined it from a standpoint of a potential
17 for -- you can go ahead and object if you have a problem.

18 (Laughter) Have you as a company examined this potential for
19 the opportunity?

20 A. We have looked at it or at least I personally have
21 looked at it. Otter Tail belongs to a group called the Plains
22 CO2 Reduction Partnership and that is a group that is
23 affiliated or works through the Energy and Environmental
24 Research Center. One of the things that those folks do look at
25 is opportunities for carbon sequestration in terms of

1 sequestration in soils. The other areas that they have been
2 looking at and evaluating is the availability of geological
3 resources to sequester CO2 once it's captured, assuming
4 technologies are available to capture it and then assuming
5 transportation infrastructure is available to get it from point
6 A to point B.

7 Q. I'm not aware of any locations relatively close to the
8 proposed site. Are you aware of any potential sequestration
9 locations?

10 A. Not any in close proximity.

11 Q. Did you happen to look at integrated gasification
12 combined cycle with this plant at all, IGCC? You are not the
13 right person to even ask that question of, are you? Forgive
14 me, I should have asked that of Mr. Rolfes.

15 MR. GUERRERO: We would certainly be willing to bring
16 Mr. Rolfes back up to ask that question and any other
17 questions.

18 COMMISSIONER HANSON: I'll ask it later. Thank you.

19 MR. SMITH: Are there other commissioner questions?

20 VICE-CHAIR JOHNSON: No.

21 MR. SMITH: Redirect?

22 MR. GUERRERO: Just a couple, Mr. Hearing Examiner.
23 Thank you.

24 REDIRECT EXAMINATION

25 BY MR. GUERRERO:

1 Q. Mr. Graumann, you were asked I believe by Ms. Denney
2 earlier about the EIS, the federal -- excuse me, Ms. Stueve,
3 earlier about the EIS process and you had mentioned the
4 necessity to do an EIS as a result of interconnections with
5 Western Area Power Administration substations. Let me just see
6 if I can clarify the record if I can. Are you familiar with
7 the term major federal action under the National Environmental
8 Policy Act?

9 A. Yes, I am.

10 Q. And do you know whether or not -- what is it? What
11 does it mean in the context of NEPA, N-E-P-A?

12 A. Well, I'm hoping I don't mischaracterize it, but
13 basically it's a decision by a federal agency that allows a
14 certain action to move forward as a part of the EIS review
15 process.

16 Q. When an agency makes a determination that something
17 would constitute a major federal action, it triggers the
18 necessity for an EIS; would that be a fair statement?

19 A. That is a fair statement.

20 Q. And Western made that determination?

21 A. Yes, they have.

22 Q. And is the EIS looking only at transmission issues?

23 A. It is not. It is looking both at the power plant and
24 transmission line.

25 Q. Earlier you were asked a question I believe by Ms.

1 Cremer about SO2 emissions, and I just wanted to clarify that
2 the 13,000 ton number that you testified to, what was the
3 correct number?

4 A. I believe it was like 13,278 tons.

5 Q. And that was tons of?

6 A. SO2.

7 Q. Thank you. When you mentioned in response to
8 Commissioner Hanson's CO2 sequestration question, are the
9 soils, what kind of soils do we have in and around the Big
10 Stone Unit II site, do you know?

11 A. What kind of soils?

12 Q. Well, let me ask this, probably a better question. Do
13 the type of soils determine whether or not a site would be a
14 better location or a less preferable location for potential
15 carbon sequestration, do you know that?

16 A. That's part of it. The other part of it would be the
17 farming practices of those soils.

18 MR. GUERRERO: No further questions, Mr. Hearing
19 Examiner. Thank you.

20 MR. SMITH: Is there additional cross-examination
21 following up on that?

22 MS. GOODPASTER: I just had one clarification
23 question.

24 RE-CROSS-EXAMINATION

25 BY MS. GOODPASTER:

1 Q. Mr. Graumann, you mentioned I think that I heard you
2 right that you said May 15th, 2005 was the final mercury rule,
3 but my understanding is it was March 15th, 2005. Is that also
4 your recollection?

5 A. There was another determination on May 15th where EPA
6 made the determination that they would not be regulating
7 mercury under the MAC rule.

8 Q. So that's what you were referring to? Okay. Thank
9 you.

10 MR. SMITH: Ms. Stueve, anything else?

11 RE-CROSS-EXAMINATION

12 BY MS. STUEVE:

13 Q. The same question I posed earlier to Mr. Rolfes, I
14 believe. He had said something akin to following the
15 recommendations of the draft EIS, which is entered or has been
16 entered into evidence today. Would you also concur that any
17 and all recommendations in the final EIS would be followed,
18 complied with?

19 A. We would.

20 Q. Co-owners?

21 A. We would.

22 Q. And a question on the process, NEPA process, what's
23 your understanding of not having a record of decision on an
24 Environmental Impact Statement and yet having a decision on a
25 plant siting?

1 MR. GUERRERO: Do you understand the question, Mr.
2 Graumann?

3 A. I'd like you to rephrase that question.

4 Q. (BY MS. STUEVE) I'm just curious about the process.
5 It seems we are here to facilitate a decision on a plant siting
6 that from all appearances looks like there could be
7 environmental impact or at least an assessment to see what the
8 impact might be, and yet we will not have a record of decision
9 on an Environmental Impact Statement, I do not believe the
10 document is to be final until the end of this year. So I am
11 wondering about the process.

12 MR. GUERRERO: I would object. I'm not sure I
13 understand the question, but to the extent that she's asking
14 for Mr. Graumann's opinion about the fact that an EIS won't be
15 complete or a record of decision won't be complete until after
16 a decision out of this commission, I would object on the basis
17 of relevance.

18 MR. SMITH: I think whether it's relevant or not, the
19 thing that drives that disparity, if you want to call it that,
20 is we are subject to a state law that requires us to render a
21 decision within one year and there's nothing we can do about
22 that. And I think -- so I guess I'm going to answer the
23 question and say there's nothing -- we are doing the best we
24 can, but regardless of how fast Western does or doesn't get
25 that EIS done, we have a statutory obligation to issue a

1 decision within the required time and short of some unforeseen
2 occurrence, we are going to do that. That's just the way it
3 is.

4 MS. STUEVE: No further questions.

5 MR. SMITH: Additional questions? You are excused.
6 Thank you. Is it time for a break? We have been at this a
7 while. Commissioners, what are your guidelines on that? We
8 have this issue with BIT so we may have to take -- I don't
9 know.

10 CHAIRMAN SAHR: Let's take at least -- why don't we go
11 off the record.

12 (Discussion held off the record.)

13 (Whereupon, hearing was in recess at 3:30 p.m. and
14 subsequently reconvened at 3:50 p.m., and the following
15 proceedings were had and entered of record:)

16 MR. SMITH: We are back on the record after our
17 recess. Do we have the problem resolved with the computer
18 system?

19 COURT REPORTER: Not really, but it's okay.

20 MR. SMITH: Applicants, please call your next witness.

21 MR. WELK: The applicants will call Ray Wahle.

22 Thereupon,

23 RAYMOND WAHLE,

24 called as a witness, being first duly sworn as hereinafter
25 certified, testified as follows:

DIRECT EXAMINATION

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BY MR. WELK:

Q. Would you please state your name?

A. Raymond Joseph Wahle.

Q. How do you spell your last name?

A. W-A-H-L-E.

Q. And Mr. Wahle, where do you work?

A. I work for Missouri River Energy Services.

Q. And why don't you tell the commission a little bit about your work history and educational background.

A. Yes, I graduated as a -- have a bachelor's of science degree in electrical engineering. I've received any master's in business administration. I am a registered professional engineer in the state of South Dakota and a member of IEEE. I have worked at Missouri River Energy Services for over 27 years. I started with Missouri River in 1979 holding various positions in the power supply area. In 1986 I moved into operations, manager of operations, and in 1990 I was promoted to the director of power supply and operations. I also have sat on various MAPP committees, including the chair of the Transmission Schedules and Compensation Committee and I am currently sitting on the MISO Advisory Committee and I am the MAPP PDU rep on that committee.

Q. Have you filed prefiled testimony in this matter?

A. Yes, I have.

1 Q. You have filed direct testimony that is marked as
2 Applicants' Exhibit 3; is that correct?

3 A. That is correct.

4 Q. And have you also filed prefiled rebuttal testimony?

5 A. Yes, I have.

6 Q. And is that marked as Applicants' Exhibit 41?

7 A. That is correct.

8 Q. And did you prepare or cause those exhibits to be
9 prepared on your behalf?

10 A. Yes, I did.

11 Q. Are there any changes or corrections to Exhibits 3 or
12 41?

13 A. Yes, there is. I have three changes. On Applicants'
14 Exhibit 41, page five, line 11.

15 Q. Let's wait till everybody gets there. Proceed.

16 A. Applicants' Exhibit 41, page five, line 11, an eight
17 should be after the 23. In Applicants' Exhibit 41, page five,
18 line 19, the eight should also be inserted after the 23. And
19 then in Applicants' Exhibit 41, page eight, line 10, the 11
20 should be 12.

21 Q. Let's wait for everyone to get there. Page eight,
22 line 10 of Exhibit 41; is that correct?

23 A. That is correct.

24 Q. And the number 11 before member community should be
25 what?

1 A. Twelve.

2 Q. Are there any further changes and corrections to
3 Exhibits 3 or 41?

4 A. No.

5 Q. If I ask all of the questions contained in Applicants'
6 Exhibit 3 and 41, would you give the answers as amended today
7 to those questions?

8 A. Yes, sir.

9 Q. Would you please summarize your testimony?

10 A. Yes. Good afternoon, commissioners. In my direct
11 testimony, I summarize both the Missouri River Energy Services
12 as well as the benefits that Big Stone II will provide for the
13 Missouri River and its membership. Missouri River is composed
14 of 60 member communities located in the states of North and
15 South Dakota, Minnesota and Iowa. We cover an area about 650
16 miles north to south and a little over 400 miles east to west.
17 Our northernmost member is Cavalier, North Dakota, our
18 southernmost member is Fontanelle, Iowa. In terms of Faith,
19 South Dakota is our westernmost member and Hutchinson,
20 Minnesota, our newest member, is our easternmost member. We
21 serve a relatively rural area. The average population of our
22 member communities is only 4100, although our largest member,
23 Moorhead, is a little over 32,000 people and our smallest
24 community, Pickstown, South Dakota, which is just south of
25 here, it's only 168 people.

1 In terms of the total number of meters that are served
2 by our members, it's about 120,000. Missouri River of course
3 is a joint action agency and we just provide the wholesale
4 services to -- the wholesale sales I should say to the
5 municipalities and the municipalities provide the distribution
6 services.

7 In terms of Missouri River is not rate regulated by
8 the South Dakota PUC nor any other state commission nor are our
9 members regulated by any state commissions. Our board of
10 directors is composed of 13 members, which is elected from our
11 membership on a three-year rotating term basis. Our board sets
12 the strategic direction for Missouri River, they approve the
13 budget and set the rates for Missouri River.

14 In terms of my direct testimony, I have summarized the
15 benefits that Missouri River will see when it participates in
16 the Big Stone II project. First of all, of course it's there
17 to meet both the demand and energy that our members need. We
18 have the ongoing obligation of meeting their load growth. All
19 of our S-1 members have a long-term contract, it goes until
20 2045 and the purpose of that, we have to supply the power and
21 energy over and above the power and energy each of these 57
22 members purchase from the Western Area Power Administration.

23 The benefit, another benefit we see to the Big Stone
24 plant is that it will be a dispatchable resource. That means
25 the plant, we could have the plant output change to meet our

1 actual members' need on a load pattern basis. It also can
2 provide certain ancillary services and those ancillary services
3 are such things as VAR support, VAR support, V-A-R, all caps
4 VAR support is necessary to provide voltage control on the
5 transmission system. It will also provide regulation as well
6 as load following. The Big Stone unit will be a base load
7 generation and this will be in the MISO market.

8 Currently Missouri River has approximately 40 percent
9 of its load in the MISO market. We have no significant
10 generation in the MISO market. We have no base load generation
11 at all in the MISO market, so this will be the first unit that
12 we have in the MISO market. The one large, very large benefit
13 to Missouri River in having a unit in the MISO market will
14 eliminate the pancake rates that we currently pay. Currently
15 all of our major resources are located on the Western Area
16 Power Administration transmission system and therefore we have
17 to pay a transmission tariff to WAPA as well as transmission
18 losses when we move the power from our major resources
19 currently located on the IF into the MISO system. When Big
20 Stone comes on line, we will avoid having to pay those pancaked
21 rates.

22 Also the location of Big Stone is very good for
23 Missouri Basin, excuse me, Missouri River, in the fact that
24 it's located almost in the geographic center of our members,
25 our members area. That is, 44 of the 57 S-1 members will be

1 within 150 miles of the plant. While there is no perfect hedge
2 against congestion losses in the MISO footprint, you can reduce
3 the possibility of having to pay for congestion and higher
4 losses if your generation is located closer to your load.

5 Finally, I guess the other benefit we see that
6 Missouri River has the philosophy of owning and controlling its
7 major assets and of course the ownership structure allows
8 Missouri River to do this.

9 In terms of my rebuttal testimony, I reviewed the
10 testimony of Mr. Goldberg. In Mr. Goldberg's testimony, he
11 assumed, or I compared the Big Stone Unit II output versus the
12 1,220 megawatts of wind from Mr. Goldberg's testimony. Mr.
13 Goldberg assumed this amount of wind to provide on average a
14 similar amount of energy on an annual basis. And I noted in my
15 rebuttal testimony that energy cannot be stored. Therefore,
16 because it cannot be stored, even though the wind is being
17 produced, it has to be consumed at the same time. As
18 utilities, we have to produce the same amount of energy in the
19 exact quantities and exact time that our customers need that
20 energy and not being able to store the energy does not make the
21 wind as useful a product versus if we could have stored it.

22 I also note that the accredited capability of 1320
23 megawatts of wind is significantly different versus the
24 accredited capability of Big Stone. We estimate, based on the
25 design of Big Stone, that we will receive accredited capability

1 of Big Stone of 600 megawatts. However, based on the most
2 recent application and map by the utilities who have accredited
3 wind generation, and that was in January of this year, based on
4 the actual performance of the wind in the July and August
5 period of last year, the actual accreditation would be between
6 five and 18 percent. That translates into between 66 and 238
7 megawatts for a 1300 megawatt wind farm.

8 The wind is not dispatchable. It obviously produces
9 energy when the wind blows and the output is proportional to
10 the wind. And wind cannot provide any ancillary services. As
11 a matter of fact, wind is a large consumer of ancillary
12 services. Having said all that, Missouri River is planning and
13 in our Integrated Resource Plan, we are planning on installing
14 additional wind resources to meet the Minnesota REO.

15 Q. Does that conclude your summary?

16 A. Yes, that concludes my summary.

17 MR. WELK: I would tender the witness for
18 cross-examination.

19 MR. SMITH: Has this -- have the exhibits been
20 offered?

21 MR. WELK: No. Thanks. I will go ahead and offer as
22 amended Exhibits 3 and 41.

23 MR. SMITH: Is there any objection?

24 MR. O'NEILL: No objection.

25 MS. STUEVE: No.

1 MR. SMITH: Applicants' 13 and 41 are --

2 MR. WELK: Three.

3 MR. SMITH: Three? Okay. I wrote down the wrong one.
4 Three and 41 are admitted.

5 EXHIBITS:

6 (Applicants' Exhibit Nos. 3 and 41 received into
7 evidence.)

8 MR. SMITH: Please proceed.

9 CROSS-EXAMINATION

10 BY MR. O'NEILL:

11 Q. Good afternoon.

12 A. Good afternoon.

13 Q. In your summary testimony, you stated that energy from
14 wind cannot be stored; do you recall that?

15 A. That's correct.

16 Q. But you can't store energy from coal either, can you?

17 A. That's correct.

18 Q. All right. In your testimony in Exhibit 3 on page 12,
19 you write, one of the benefits of the proposed Big Stone Unit
20 II, and I'm talking and referring you to page 12, line seven
21 and eight, offers to MRES members and their customers a stable
22 and long-term price certainty, and then you go into a number of
23 reasons. Do you remember writing that testimony?

24 A. Yes, I do.

25 Q. All right. Tell me what factors could influence the

1 price of coal and how that would affect price certainty of this
2 project.

3 A. Well, the price of coal is one of the commodities that
4 obviously we are going to use at Big Stone II. And any
5 escalation in the price of coal would affect the price of the
6 power from Big Stone II.

7 Q. And what factors, if you can tell us, would affect the
8 cost of coal? We have heard about the rail delivery, but maybe
9 you can touch on that, let us know if you believe that could be
10 a factor that could affect the price and any other factors.

11 A. Certainly the rail delivery can be a factor and price
12 escalation just from the mines could be a factor.

13 Q. Anything else?

14 A. Possible future regulation could also be a factor.

15 Q. When you talk about price escalation from the mines,
16 is that just the mines setting a higher price based upon their
17 own internal decision or what are you referring to in regard to
18 that?

19 A. The mines periodically change prices. I'm not exactly
20 sure why they do that. I mean, the prices do change just as
21 other prices change in the economy.

22 Q. Okay. Have you had any ability to quantify what you
23 anticipate the changes to be in that regard?

24 A. We have in our Integrated Resource Plan that we have
25 recently performed, we have made estimates of what we believe

1 would be the price escalation of fuel.

2 Q. And do you know what those numbers are off the top of
3 your head?

4 A. No, I do not recall.

5 Q. They are in your testimony, though?

6 A. No, they are not. They are in our Integrated Resource
7 Plan that we used as part of a decision making process to
8 determine our involvement in Big Stone.

9 Q. That's contained within the application here?

10 A. Our IRP is not.

11 Q. But if we went to find the IRP and looked at it, it
12 would contain the information that you are referring to?

13 A. Yes, and Mr. Tielke could provide additional
14 information on that for Missouri River.

15 Q. How about possible future CO2 legislation, what -- did
16 you have an opportunity to quantify that as it relates to the
17 cost effects that that could have on this plant?

18 A. We did not in our IRP assume any cost of CO2.

19 Q. As it relates to rail delivery problems, did you or
20 has Missouri River looked at that issue at all recently?

21 A. No, we have not.

22 Q. Has there been any quantifying of the problems as it
23 relates to the rail delivery problems such that the rail rate
24 increase that is occurring in Laramie River Station is costing
25 MRES \$7 million in 2006?

1 MR. WELK: Objection as to foundation. You haven't
2 established that this witness understands or has any knowledge
3 of that.

4 MR. SMITH: Sustained.

5 Q. (BY MR. O'NEILL) We were talking about the rail
6 delivery problems; do you remember when you and I were talking
7 about that?

8 A. Yes.

9 Q. Are you familiar with any rail delivery problems with
10 the Laramie River Station?

11 A. Yes.

12 Q. And am I correct if I state that MRES has stated that
13 the rail rate increase is costing your company \$7 million in
14 2006 at the Laramie River Station?

15 A. Yes, that's correct.

16 Q. Okay. And that based upon that, that there is going
17 to be a need to increase electricity rates on behalf of MRES.

18 A. Yes, that is correct. That is one of the factors
19 causing the rates to rise.

20 Q. And that MRES has scaled back power production by 75
21 percent because of lagging coal deliveries at the Milbank power
22 plant.

23 A. I'm not -- I don't understand your question.

24 Q. Has there been a scaling back of power production by
25 75 percent because of the rail delivery problems at -- that

1 have occurred that have affected the Big Stone plant in
2 Milbank?

3 A. We are not involved in the Big Stone I plant so I
4 don't know what the answer to that question is.

5 Q. Okay.

6 MR. WELK: Wrong company.

7 MR. O'NEILL: Okay.

8 Q. (BY MR. O'NEILL) I have a follow-up question on the
9 IRP. Did you recently complete the IRP after the application
10 was filed in this case?

11 A. We completed our IRP on July 1st of 2005. On May 9th
12 of 2006, we filed a supplement to our IRP.

13 Q. Okay. And is the coal escalation contained in the
14 supplemental filing that you made in that regard?

15 A. I don't recall. I think that's a question you are
16 going to have to ask Mr. Tielke.

17 Q. Okay.

18 MR. O'NEILL: Thanks, that's all I have.

19 MR. SMITH: Ms. Stueve.

20 CROSS-EXAMINATION

21 BY MS. STUEVE:

22 Q. Yes, good afternoon.

23 A. Afternoon.

24 Q. They were asking a few questions on what would, would
25 not impact coal pricing. In your understanding, estimation,

1 would future updated safety mandates to coal mines affect the
2 coal pricing?

3 A. I don't know the answer to that question.

4 Q. Okay. How about would increased demand for
5 subbituminous coal mines increase, has the potential to
6 increase coal pricing as more and more proposed coal plants
7 across the nation come on line?

8 A. I don't know the answer to that question, but in
9 speculation, you could also have additional coal mines and the
10 prices could also drop, so the higher prices could encourage
11 more mines, which could lower the price.

12 Q. Okay.

13 A. It's happened in the past.

14 Q. All right. In your estimation, would wind energy get
15 another look by utilities in general or by MRES if it could get
16 stored?

17 A. If we could store energy?

18 Q. If we could store wind energy, yes.

19 MR. WELK: I'd like to have you establish the
20 foundation for that.

21 Q. (BY MS. STUEVE) Okay, compressed air energy storage,
22 there will be an energy facility coming on line down in
23 Oklahoma, Texas, it's in the Milbank testimony from September,
24 last September 2005, there's a document, a report come on in
25 three years time and it's compressed air energy storage. So

1 wind energy can get stored and electricity will be coming forth
2 three years from this.

3 MR. WELK: Objection to the form of the question. You
4 are testifying. You haven't established the foundation with
5 this witness.

6 MR. SMITH: I'm going to overrule the foundation
7 question or part of the objection. I do think the form of the
8 question is well taken, but I think Mr. Wahle did testify
9 concerning the limitations of wind as a base load resource due
10 to its inability to be stored. So I think he can express an
11 opinion on the converse proposition as well.

12 A. In terms of the wind storage, the way I understand the
13 project is being formed is first of all, you have to have a
14 storage cavern, usually a salt dome in which you can inject
15 wind. Or I should say -- not wind, but you can inject
16 compressed air. In order to do that, obviously you have to
17 find a geological formation that is capable of storing
18 compressed air. The next thing you would have to do is
19 obviously build a wind infrastructure in order to do that,
20 which includes a collection system and transmission upgrades,
21 and then also in order to be able to utilize that compressed
22 air, you then have to build a gas fired plant, usually a
23 combustion turbine operated either in single cycle or combined
24 cycle mode. So that would be the way I understand it. That
25 would be basically the facility, if you will, it would be

1 composed of those elements. Now, whether that facility would
2 eventually wind up being a lower cost than a Big Stone II, I
3 don't know. We haven't looked at that, but that's a lot of
4 infrastructure to be able to store compressed air.

5 Q. (BY MS. STUEVE) Thank you. One last question. Would
6 you agree that South Dakota has geological formations capable
7 of storing wind such as underground caverns?

8 A. I'm not privy to that knowledge.

9 MS. STUEVE: Thank you. No further questions.

10 MR. SMITH: Staff.

11 MS. CREMER: Staff has no questions, thank you.

12 MR. SMITH: Commissioners, questions of Mr. Wahle?

13 EXAMINATION

14 BY COMMISSIONER HANSON:

15 Q. I have one. Good afternoon.

16 A. Good afternoon.

17 Q. On your very last slide, I was having a little --
18 forgive me, but I was confused as you were explaining the
19 amount of wind turbines, 1300 some megawatts that were
20 necessary and you had on the very last page, you showed of
21 course that Big Stone is going to have 600 megawatts and then
22 on the next line you showed 200 -- excuse me, 66 megawatts
23 times 238 megawatts, maybe it wasn't times, it was sort of the
24 converse to me of coming up with it, and I'm not certain, are
25 you saying, then, that a wind farm, in order to have 600

1 megawatts of energy, you would have to have at least 1,320
2 megawatts of wind turbines?

3 A. No, what I was referring to and what I'm referring to
4 in that slide is the accredited capability of Big Stone, which
5 we based on the design that we are proposing, would have an
6 accredited capability from MAPP of 600 megawatts.

7 Q. Okay.

8 A. From MAPP, and then a wind farm of 1320 megawatts,
9 based on MAPP's criteria, we would estimate that it would have
10 between five and 18 percent of its nameplate capability for the
11 July and August time period, and that's where five percent is
12 66 megawatts, 18 percent is the 238 megawatts, and so we would
13 anticipate that a wind farm with 1320 megawatts would actually
14 receive accreditation from MAPP between those two numbers.

15 Of course as utilities we have to maintain to meet our
16 peak demand plus 15 percent and you have to do that with
17 accredited capability. And so that's why the number, the
18 accredited capability is very important when you are looking at
19 meeting your reliability obligations in the pool.

20 COMMISSIONER HANSON: Exactly. Understood. Thank you
21 very much. Appreciate that.

22 MR. SMITH: Redirect.

23 MR. WELK: Just a couple questions.

24 REDIRECT EXAMINATION

25 BY MR. WELK:

1 Q. First of all, in regard to Commissioner Hanson's
2 question, would you define for the record what accredited
3 capability means in the context of MAPP?

4 A. Accredited capability is basically MAPP goes through a
5 process and basically is a technical measurement of the
6 capability of a plant, of a power plant. And you follow the
7 testing rules of MAPP and once you follow the testing rules of
8 MAPP, MAPP will then assign accredited capability to that
9 plant. And what you have to do then from a MAPP perspective
10 and a reporting perspective, you then basically take your peak
11 demand and add up all your accredited capability and this is an
12 after the fact calculation and what you have to do is your peak
13 demand has to be 115 percent less than your accredited
14 capability. Otherwise you basically get a significant fine
15 from MAPP.

16 Q. And is that the consequence, a monetary fine?

17 A. That's the one consequence. That would be your
18 immediate consequence. The reason MAPP -- it's a very
19 significant fine and the reason MAPP has that is because MAPP
20 wants to make sure that there's enough accredited capability in
21 the pool during the time of peak, so we can avoid blackouts.

22 Q. Just one other issue. You mentioned in answer to one
23 of the counsel's question about the fact that carbon regulation
24 and rail delivery was not looked at by you. When you were
25 answering those questions, were you testifying that those

1 issues were not looked at by Missouri River individually?

2 MR. O'NEILL: I object to the characterization of the
3 question. I didn't say looked at, I said quantified.

4 MR. WELK: Accepted.

5 Q. (BY MR. WELK) That when you referred to quantified,
6 was that something that you were referring in answering that
7 question that's something that Missouri River individually
8 didn't look at; is that what you are saying?

9 A. That is correct, and I think that's what I made the
10 statement, Missouri River did not look at that quantification.

11 MR. WELK: Thank you. I have no further questions.

12 MR. SMITH: Recross.

13 MR. O'NEILL: Nope.

14 MS. STUEVE: Just one question.

15 RE CROSS-EXAMINATION

16 BY MS. STUEVE:

17 Q. Does Missouri River Energy Services buy and sell on
18 the open market?

19 A. We try to maximize -- we do some of that to both buy
20 and sell when we have excess energy to try and minimize our
21 costs to our members. Our members are directly responsible for
22 paying all of our costs and they expect us to minimize our
23 overall costs, and yes, we do that. We buy when it's cheaper
24 to purchase on the open market than produce and if we can
25 produce it cheaper, then we would sell it if we have some

1 excess.

2 MS. STUEVE: Thank you.

3 MR. SMITH: Anything else?

4 MR. WELK: Nothing further.

5 MR. SMITH: You may step down.

6 A. Thank you.

7 MR. SMITH: Thank you. Just a sec, Tom, if I could.
8 I'll address this I guess openly here. Commissioner Hanson had
9 expressed a desire to want to ask at least one or maybe more
10 follow-up questions of Mr. Rolfes. Do you want to do that some
11 other time or should we get that over with?

12 COMMISSIONER HANSON: Actually, I had not found -- I
13 was curious about IGCC and Commissioner Johnson pointed out he
14 is far more studious than I apparently, and he was able to find
15 information. Perhaps it's because of where it was located in
16 the process. I had not found IGCC information and so I'm
17 reviewing that right now to see whether or not I have any
18 questions.

19 MR. SMITH: We will proceed with your next witness,
20 then, Mr. Welk.

21 MR. WELK: Thank you. The applicants will call Mike
22 McDowell.

23 Thereupon,

24 MICHAEL McDOWELL,
25 called as a witness, being first duly sworn as hereinafter

1 certified, testified as follows:

2 DIRECT EXAMINATION

3 BY MR. WELK:

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

5 A. My name is Mike McDowell.

6 Q. And Mike, have you filed testimony in connection with
7 this proceeding?

8 A. I have.

9 Q. And has that been marked as Applicants' Exhibit 4?

10 A. It has.

11 Q. And are there any changes or corrections to
12 Applicants' Exhibit 4?

13 A. No.

14 Q. If I asked the questions contained in Exhibit 4 for
15 the applicants, would you give the answers that you provided in
16 the exhibit?

17 A. Yes.

18 MR. WELK: Move for admission of Applicants' Exhibit
19 4.

20 MR. SMITH: Objections? Hearing none, Exhibit 4 is
21 admitted.

22 EXHIBITS:

23 (Applicants' Exhibit No. 4 received into evidence.)

24 Q. (BY MR. WELK) Would you please summarize your
25 testimony, Mike?

1 A. I will. The purpose of my testimony is to provide
2 some background information on Heartland and also to detail the
3 reasons why we chose to participate in the Big Stone Unit II
4 project. Heartland Consumers Power District was organized
5 under South Dakota law 37 years ago to provide electric power
6 to municipalities and state agencies. Heartland is governed by
7 a ten-person board of directors elected on a nonpartisan basis
8 in eastern South Dakota.

9 The law under which we operate provides that the
10 purpose of the district is to supply electric power and energy
11 to public power entities within South Dakota as well as other
12 states. The law also provides that the district is to extend
13 and encourage the use of electricity. All of Heartland's
14 initial customers held federal power allocations. Heartland
15 has worked with these customers on an individual basis for many
16 years to maximize their use of the renewable federal hydropower
17 resource.

18 The initial Heartland customers exceeded their
19 hydropower allocations less than 10 years after the district
20 was organized and in order to meet this load growth, Heartland
21 became a participant in the Laramie River Station in Wyoming as
22 well as a co-owner of the Integrated Transmission System, a
23 high voltage transmission system operating in South Dakota and
24 five neighboring states.

25 Heartland currently serves municipalities located in

1 South Dakota, Minnesota and Iowa, as well as three South Dakota
2 state agencies and one South Dakota rural electric cooperative,
3 all under long-term power supply contracts. Heartland serves
4 these loads with a diverse resource base that will be detailed
5 in the testimony of John Knofczynski, our manager of
6 engineering.

7 The map that you see indicates that the bulk of our
8 customers are indeed in South Dakota as well as the three state
9 agencies that we currently serve, that include both the
10 University of South Dakota and South Dakota State University.

11 Heartland operates on two basic principles when we
12 look at power supply options, reliability and affordability.
13 Heartland, like other utilities, must be able to provide
14 reliable power to meet both summer peak and winter peak usage.
15 The reliability issues that we are concerned with have been
16 addressed in the testimony of Peter Koegel and Bryan Morlock.
17 Affordability is important to us, as most of the end use
18 customers of our wholesale customers live in rural areas and
19 according to published demographic records, do not have the
20 income seen in urban communities. High energy rates would
21 further limit the disposable income of these consumers.

22 Heartland does continuously examine, adding more
23 renewable resources, including wind power. However, Heartland
24 cannot replace firm base load generation with wind generation.
25 A base load resource must be available for dispatch on a firm

1 basis. Wind cannot be dispatched on a firm basis due to
2 reliability.

3 Heartland considered several base load options,
4 including purchasing power from other utilities. Big Stone
5 Unit II was one of the two best options available that met
6 anticipated base load resource needs in the time frame that we
7 needed. The geographic location of the proposed project is
8 ideal for us and I would refer you back to where the bulk of
9 our customers are in South Dakota, as is the experienced
10 operating agent, Otter Tail Power.

11 Heartland is committed to 25 megawatts of the project
12 and will finance this share with long-term tax exempt bonds.
13 An investment in the Big Stone Unit II project is consistent
14 with our goal to provide long-term, stable rates to customers.
15 The Big Stone Unit II project will be a reliable and economic
16 part of our diverse resource base.

17 Q. Does that conclude your summary?

18 A. It does.

19 Q. Why don't you just give us a little bit of background,
20 Mike, you as an individual, to the commissioners.

21 A. Sure. I've been in the utility business for 25 years
22 and on my third stint as CEO of an operating utility, all of
23 them consumer owned utilities. I have a bachelor's degree in
24 political science, an education from the University of Kansas,
25 as well as a master's degree in public administration from the

1 same university. I am a member of the American Public Power
2 Association, having served on its board of directors, and a
3 member of the National Rural Electric Cooperative Association.
4 This background serves me well in the type of consumer-owned
5 utility that I prefer to work for.

6 MR. WELK: Thank you, Mike, and we will tender the
7 witness for cross-examination.

8 MR. SMITH: Intervenors, MCEA, are you ready to go?

9 MS. GOODPASTER: Yes, we are. Before I start asking
10 questions, we will have three exhibits to get marked. Those
11 would be Joint Intervenors' Exhibits 11, 12 and 13, I believe.

12 EXHIBITS:

13 (Joint Intervenors' Exhibit Nos. 11, 12 and 13 marked
14 for identification.)

15 MR. WELK: Can I get a copy of those, Ms. Goodpaster,
16 before my witness gets to answer the questions?

17 MS. GOODPASTER: Sure.

18 MS. GOODPASTER: Mr. McDowell --

19 MR. WELK: Would you give him a few minutes to
20 determine whether any of your proposed exhibits contain any
21 confidential information?

22 MS. GOODPASTER: Sure, that would be fine if he wanted
23 to verify. They weren't stamped as such when they were
24 provided to us in discovery.

25 MR. WELK: I know they were not. There were some

1 things in here I wanted him as the CEO to look at.

2 MR. SMITH: Are the exhibits, are the numbers, Ms.
3 Goodpaster, are the numbering in the sequence that they were
4 handed out? Or don't you know?

5 MS. GOODPASTER: I didn't hand them out, but I would
6 guess that probably they are in order.

7 COMMISSIONER HANSON: Rather than guessing, could you
8 tell us which one you anticipate to be marked as which exhibit?

9 MS. GOODPASTER: Yes, Commissioner Hanson. I believe
10 that Exhibit 11 is titled management, Mike McDowell, and it's
11 got -- in the right below a box it says 1/05. Then No. 12, it
12 says management, Mike McDowell, then it contains what is
13 probably a date of 6/05. Then there's a PowerPoint slide
14 presentation which would be Exhibit 13.

15 COMMISSIONER HANSON: Thank you.

16 THE WITNESS: Exhibit 13, slide number 24 on page
17 four, the first bullet would be confidential information.

18 CROSS-EXAMINATION

19 BY MS. GOODPASTER:

20 Q. Excuse me, could you just -- make sure I am familiar
21 with what you are referring to, the first bullet?

22 A. Slide number 24 on page four, lower right-hand corner,
23 it's entitled elements of risk, the first bullet has
24 information in it which would be confidential. I don't see
25 anything in Exhibit 12 or Exhibit 11. I think probably that

1 what's contained in the item I questioned initially on Exhibit
2 11 is probably public information.

3 MR. WELK: Counsel, do you intend to ask any questions
4 about the slide that he's identified?

5 MS. GOODPASTER: Actually, that is the only slide and
6 only bullet that I was going to ask him about.

7 MR. WELK: Well, with his designation, then, when you
8 get to those questions, we will designate that slide, only that
9 of those three exhibits as confidential.

10 Q. (BY MS. GOODPASTER) Mr. McDowell, we will start with
11 what's been marked as Exhibit 11, and could you tell me, do you
12 recognize that document?

13 A. Yes. It's a standard management -- yes, it's a
14 standard management report made to the board at a regular board
15 meeting.

16 Q. It contains your name at the top. Does that mean that
17 it was prepared by you or at your direction?

18 A. Yes.

19 MS. GOODPASTER: Thank you. I would move to have
20 Exhibit 11 entered into the record.

21 MR. WELK: Can you tell me what the relevance is,
22 counsel?

23 MS. GOODPASTER: Specifically I wanted to ask Mr.
24 McDowell about the bullet point number -- or the numbered
25 section six on page D-2.

1 MR. WELK: No objection, then.

2 MR. SMITH: Other parties. Hearing none, Joint
3 Intervenors' Exhibit 11 is received.

4 EXHIBITS:

5 (Joint Intervenors' Exhibit No. 11 received into
6 evidence.)

7 Q. (BY MS. GOODPASTER) Mr. McDowell, as I just
8 mentioned, the page that I'm wanting to ask about is page D-2,
9 and section six entitled railroad rates.

10 A. We have a significant disagreement with the Burlington
11 Northern Railroad over the proper rail rates for service to the
12 Laramie River Station. That disagreement is now before the
13 Surface Transportation Board, which has changed incumbents
14 several times and we are now expecting a decision maybe in mid
15 to late spring of 2007.

16 Q. Thank you. All I was going to ask you is to --
17 whether you agree, I understand you have a dispute, but in this
18 statement here, you state that railroads are proposing
19 unprecedented increases in coal hauling rates. The second
20 sentence, you state that BNSF has implemented rates for Laramie
21 River coal four times the railroad average system rate, that
22 BNSF plans to raise these already high rates by 100 percent.
23 Then you conclude that it seems clear that BNSF intends to use
24 Laramie River as a test case to see how far they can go in
25 implementing steep increases, and that there is little

1 effective federal oversight by the Surface Transportation
2 Board. It is very close to a rubber stamp for the railroads.
3 Our Big Stone II experience has been similar thus far. Is that
4 what --

5 MR. WELK: We would stipulate, Ms. Goodpaster, that's
6 what the document says that you just read.

7 A. Those are all correct statements.

8 Q. (BY MS. GOODPASTER) Thank you. Could you turn to
9 Exhibit 12, what has been marked as Exhibit 12? Again on page
10 D -- first I should ask you whether you are familiar with this
11 document.

12 A. Yes. And it was prepared at my direction or by me,
13 I'll save you the question.

14 Q. Thank you. Again I'm interested in page D-2 and I'll
15 move to admit.

16 MR. WELK: No objection.

17 MR. SMITH: Other parties? Okay, Joint Intervenors'
18 12 is admitted.

19 EXHIBITS:

20 (Joint Intervenors' Exhibit No. 12 received into
21 evidence.)

22 Q. (BY MS. GOODPASTER) I would direct your attention to
23 page D-2, section six, again entitled railroad rates, where it
24 states that the estimated impact of the current and proposed
25 BNSF rate increases on Laramie River Station could exceed a

1 billion dollars over the next 20 years. Is that correct?

2 A. That's why we are before the Surface Transportation
3 Board.

4 Q. Sure. Have you quantified the risks for Big Stone II
5 for rail delivery related price impacts?

6 A. Heartland has not individually quantified those. We
7 depend upon project calculations of those types of formulas and
8 so no, we have not done that ourselves individually.

9 Q. When you say you rely on others to prepare those, who
10 are you referring to for Big Stone II in particular?

11 A. Big Stone II studies that we would depend on have been
12 performed by Burns & McDonnell.

13 Q. So you are stating that Burns & McDonnell has
14 quantified the risks for Big Stone II for rail delivery related
15 price impacts?

16 A. I would have to specifically go back and look at their
17 study to determine what it says and it's been a while since I
18 looked at that study, so if you want an answer, I'll probably
19 have to go back and look at it and give you one in writing.

20 Q. Okay. I appreciate that, thank you. I can also -- I
21 understand that there's a Burns & McDonnell witness that will
22 be available in coming days. I then wanted to turn to the
23 confidential slide exhibit.

24 MR. WELK: Since this has been designated now and I
25 know it wasn't your doing, we just designated it now, but there

1 are some people, everybody who has got a copy of this, have
2 they signed Exhibit A?

3 MS. GOODPASTER: It looks like Mary Jo did not.

4 MR. WELK: You can keep the other pages other than the
5 one. Is it your intent at this time to ask questions about the
6 slide we have designated?

7 MS. GOODPASTER: Yes, I can lay the foundation for
8 having the exhibit admitted or we could go --

9 MR. WELK: Why don't you lay the foundation as to his
10 knowledge.

11 Q. (BY MS. GOODPASTER) Do you recognize this set of
12 slides that is reprinted on Exhibit 13?

13 A. Yes.

14 Q. And is this -- what is it? Is it what it says it is,
15 Heartland's proposed 2005 budget presentation?

16 A. Yeah, it is a budget presentation made by our staff at
17 the time.

18 Q. Was it prepared by you or at your direction?

19 A. Yes.

20 MS. GOODPASTER: I would move Exhibit 13 be admitted
21 to the record.

22 MR. WELK: No objection, except to designate slide 24,
23 and what we will handle, I propose that you go ahead and finish
24 your questions with people leaving the room, but then I'd like
25 to redact that page, if we could, and put it in a separate

1 filing. We will assume that responsibility to do that.

2 MS. GOODPASTER: Okay, I appreciate that.

3 MR. SMITH: Okay. I will have to ask that everyone in
4 the room who has not executed a confidentiality agreement or
5 who is not a member of staff leave the room. Then we gotta
6 shut off the Internet. We will be off the Internet for a
7 little while.

8 (Discussion held off the record.)

9 MR. WELK: Could I seek permission from the hearing
10 officer and the commission, then, after the hearing to remove
11 HCPD000402 and then we will redact or white out slide 24 and
12 then we will put slide 24 in a separate envelope to be filed in
13 the record?

14 MR. SMITH: Yes. That's fine. You certainly could do
15 that. Let me ask you this. If that's the only slide that's of
16 relevance, might we not just have that be the exhibit if that's
17 all we are talking about?

18 MR. WELK: If that's what she wants, it's her exhibit.

19 MR. SMITH: Are there other elements of this that you
20 will be using that you think are -- would be used in your
21 argument or whatever?

22 MS. GOODPASTER: The only slide just happens to be the
23 one that I'm not -- that he talked about.

24 MR. SMITH: If that's it, could we have a substitute
25 exhibit that just consists of this?

1 MS. GOODPASTER: Yeah, I didn't realize that it was
2 confidential information since it hadn't previously been marked
3 that way when produced to us, so given that that is now the
4 case, we only need one page, that page.

5 MR. SMITH: Okay. Why don't we do that, then, and
6 just substitute that page. Are the markings on the front at
7 all necessary?

8 MS. GOODPASTER: It has a title page for the slide
9 presentation, but I believe I established what it is on the
10 record.

11 MR. SMITH: Have -- I can't remember, have we -- I
12 can't remember whether you offered it yet.

13 MS. GOODPASTER: I think I did.

14 MR. SMITH: I think you did. Why don't we do that.

15 MR. WELK: Why don't we take off the rest of the pages
16 and make this 13, remark it. We will all save ourselves a
17 little time. We will stipulate to the withdrawal of all the
18 pages what was previously marked as Exhibit 13 and substitute
19 HCPD000402 as Exhibit 13.

20 MS. GOODPASTER: Joint intervenors agree with that
21 process.

22 (Brief pause.)

23 EXHIBITS:

24 (Joint Intervenors' Exhibit No. 13 received into
25 evidence.)

1 MR. WELK: The record should also reflect we are
2 passing around a rubber stamp, so to speak, to put the word
3 "confidential" on Exhibit 13 for those of you that have it in
4 your possession.

5 MR. SMITH: I'm under the understanding that the
6 persons still in the audience are subject to the
7 confidentiality covenant; is that correct? Thank you. I think
8 maybe you can proceed now, Ms. Goodpaster.

9 Q.. (BY MS. GOODPASTER) Thank you. I have a feeling I'm
10 going to go down in history here for having cleared the room
11 for this one thing, but I apologize. Mr. McDowell, looking at
12 what has been remarked as Exhibit 13, which is Bates stamped in
13 the bottom corner as HCPD000402, I would call your attention to
14 slide number 24 in the first bullet. Okay, slide 24, it's
15 entitled elements of risk and the first bullet is
16 drought-related curtailment of LRS, and LRS is Laramie River
17 Station?

18 A. Yes.

19 Q. Thank you. And the third sub bullet under that bullet
20 states, net impact \$3.4 million additional expense; is that
21 correct?

22 A. Yes.

23 Q. Have you quantified the risks for Big Stone II for
24 drought-related price risks?

25 A. No, but I believe those quantifications are part of

1 studies that were done for the project itself and I think they
2 will be testified to by other persons testifying in the
3 proceeding.

4 Q. It's your belief that in this record there is a
5 quantification of the risks for Big Stone II, price-related
6 risks for Big Stone II for drought consequences?

7 A. I believe the drought issue has been addressed by
8 other persons testifying here.

9 Q. Okay.

10 A. I need to add, if you will permit me, elements of risk
11 that we use in budget making are designed to make our board
12 aware of sometimes worst case scenarios. There was no drought-
13 related curtailment of LRS. We acquired groundwater resources
14 from surrounding ranches and surrounding surface sources and
15 LRS continues to operate at full power with no drought-related
16 curtailments.

17 Q. And so something similar, a similar scenario is a
18 possibility of Big Stone II where even not curtailed, they
19 would have to acquire water rights, groundwater rights from
20 elsewhere?

21 A. It would be impossible for me to say that because LRS
22 and Big Stone II are two entirely different power plants in two
23 entirely different locations and so that would be -- it would
24 be impossible for me to answer that.

25 Q. Okay, so you yourself and on behalf of Heartland have

1 not looked at that issue with respect to this new plant,
2 although you have experienced that issue at the Laramie
3 station.

4 A. The project itself has performed some studies of the
5 impact or lack thereof of drought at Big Stone II and I think
6 those will be detailed and have been detailed in testimony that
7 others have submitted.

8 Q. Okay, I have seen some of that testimony. I haven't
9 seen a quantification of price risks, however. Do you have
10 somebody in particular in mind?

11 A. Yeah. That I'm not qualified to comment on. I can
12 only comment on what we did for LRS. We don't have any
13 individual quantifications that we have done on price risk to
14 Big Stone II.

15 Q. And when -- in your experience at Laramie River
16 Station, that \$3.4 million additional expense to acquire
17 groundwater rights, that was an additional operating expense
18 for the --

19 A. No, that \$3.4 million would have been the additional
20 expense to us if we had had to curtail operations at the power
21 plant for lack of water. That's what that \$3.4 million refers
22 to.

23 Q. And that -- had that happened, it would have increased
24 the operating costs of Laramie River Station?

25 A. That's correct.

1 MS. GOODPASTER: That's all I have on the confidential
2 information.

3 MR. SMITH: Staff, do you have anything?

4 MS. CREMER: I have nothing.

5 MR. SMITH: Is there any redirect relative to this?

6 MR. WELK: Not on that issue.

7 MR. SMITH: Commissioners, do you have questions?

8 VICE-CHAIR JOHNSON: No.

9 MR. SMITH: Well, I think we are done with the
10 confidentiality portion, confidential portion, then, and why
11 don't we call everybody back in. We are back in
12 nonconfidential public session and I think the public, members
13 of the public are back in and we have now resumed transmission
14 on the Internet, so please proceed, Ms. Goodpaster.

15 Q. (BY MS. GOODPASTER) Thank you, Mr. Smith. Mr.
16 McDowell, at the beginning of your -- you made a presentation
17 at the beginning and one of the things you stated there was
18 that the purpose or the goal of the district is to extend and
19 encourage use of electricity by law.

20 A. That's in our state statute.

21 Q. Okay. And so does that mean, then, that it's a
22 violation of statute for Heartland to reduce electric usage?

23 MR. WELK: Objection to the form of the question. It
24 calls for a legal conclusion.

25 MR. SMITH: Could you rephrase the question? I'm

1 going to sustain it in that form.

2 Q. (BY MS. GOODPASTER) Mr. McDowell, is it your
3 understanding as the CEO of Heartland that the district's goal,
4 the district is prohibited from reducing electric usage?

5 A. I can't give you a legal opinion, but I can tell you
6 that we work with our customers on an individual basis to
7 maximize the federal hydropower resource and to use the thermal
8 as efficiently as possible, and that's as far as I can go. I'm
9 not an attorney, but I know that prior to my arrival at
10 Heartland, this was Heartland's practice and we have
11 intensified that after my arrival. The efficient use of
12 electricity is consistent, in my view, with the statute.

13 Q. Okay, and I didn't -- I wasn't looking for a legal
14 opinion, but more what the district considers its goals and
15 purpose to be and whether it would be contrary to those goals
16 and objectives to reduce electric usage.

17 A. I don't think I can respond to that word "reduce." I
18 can respond by saying that we work with our customers to use
19 electricity as efficiently as possible.

20 MS. GOODPASTER: Thank you, Mr. McDowell.

21 MR. SMITH: Is that all?

22 MS. GOODPASTER: I have no further questions.

23 MR. SMITH: Ms. Stueve.

24 MS. STUEVE: I do have one question.

25

CROSS-EXAMINATION

1 BY MS. STUEVE:

2 Q. Good afternoon --

3 A. Good afternoon.

4 Q. -- to you. Does Heartland buy and sell on the open
5 market?

6 A. No.

7 MS. STUEVE: Thank you.

8 MR. SMITH: Is that all?

9 MS. STUEVE: That's all.

10 MR. SMITH: Staff.

11 MS. CREMER: Staff has no questions, thank you.

12 MR. SMITH: Commissioners.

13 COMMISSIONER HANSON: None.

14 MR. SMITH: Anybody? Mr. Welk.

15 MR. WELK: No redirect.

16 MR. SMITH: You are excused, Mr. McDowell. Thank you.

17 MR. SASSEVILLE: Mr. Smith, we propose putting on Mr.
18 Jerry Tielke at this time and would also propose that he be the
19 last witness of the day. We think that tomorrow we will have a
20 full day but we won't have to go late, based on the slate of
21 witnesses that are here tomorrow.

22 MR. SMITH: Commissioner comments.

23 CHAIRMAN SAHR: How long do they expect to be?

24 MR. SMITH: How long are we looking at?

25 MR. SASSEVILLE: I would think less than a half hour.

1 The intervenors probably would be. . .

2 MR. SMITH: Sure. Can we go off the record just a
3 second here?

4 (Discussion held off the record.)

5 MR. SMITH: Then please call your next witness.

6 MR. SASSEVILLE: Thank you, Mr. Smith. The applicants
7 call Jerry Tielke.

8 (Discussion held off the record.)

9 MR. SMITH: After a discussion off the record among
10 counsel, we have elected to recess for the day and we will
11 reconvene at 8:30 in the morning and you all have a good
12 evening.

13 (Whereupon, the hearing was in recess at 5:00 p.m.,
14 and subsequently reconvened at 8:30 a.m. on Tuesday, June 27.)
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C E R T I F I C A T E

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STATE OF SOUTH DAKOTA)
) ss.
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 26th day of June 2006.

Carla A. Bachand

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.

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