

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Northern States Power Company :
Electric Rate Increase : Case No. PU-07-776
Application :

TRANSCRIPT OF
HEARING
(VOLUME I)

Taken At
State Capitol
Bismarck, North Dakota
June 23, 24 & 25, 2008

BEFORE THE HON. AL WAHL
-- ADMINISTRATIVE LAW JUDGE --

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COMMISSIONERS PRESENT:

COMMISSIONER SUSAN WEFALD, President
COMMISSIONER TONY CLARK
COMMISSIONER KEVIN CRAMER

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ADVOCACY STAFF.

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1 (The proceedings herein were had and made
2 of record, commencing at 8:02 a.m., Monday, June
3 23, 2008, as follows:)

4 JUDGE WAHL: Good morning. I am Al Wahl,
5 the administrative law judge designated by the
6 Office of Administrative Hearings pursuant to a
7 temporary appointment to act as the hearing officer
8 for the hearing of the application of Northern
9 States Power Company, doing business in North
10 Dakota as Xcel Energy, for an electric rate
11 increase.

12 Northern States Power proposes a \$20
13 million, or 14 percent, increase in its annual
14 North Dakota electric revenues. The proposed rate
15 increase would affect Northern States Power's
16 service to all of its approximately 85,000 retail
17 electric customers in the State of North Dakota.

18 Before proceeding with the hearing, I will
19 ask the Commissioners for their comments and any
20 directions for the hearing. Commission President
21 Susan Wefald.

22 COMMISSIONER WEFALD: Good morning. Nice
23 to have everyone with us this morning, that
24 everyone got here safely. I think it's somewhat
25 ironic that I've been on the Commission now since

1 January of 1993, and the very first case that was
2 presented to me was a reconsideration of the 1992
3 order of the NSP rate case at that time. So I
4 remember I did a lot of learning in those first six
5 months about a rate case and I started with an NSP
6 rate case. Since that time we have gone through
7 small increases, small decreases in rates, we've
8 had performance-based ratemaking, which we all
9 worked together on and which worked for five years,
10 and now we're at the end of my term in office,
11 because I plan to leave on December 31st of this
12 year, another rate case for Xcel Energy, so it's
13 kind of nice to start and to finish my time at the
14 Commission with a major rate case for a major
15 utility that affects so many people in our state.
16 And I have taken a great deal of interest in this
17 case, as I do any one, but this one does -- for
18 electricity, for the citizens and the businesses of
19 Minot, Grand Forks and Fargo and their surrounding
20 areas, this is a very significant case and I look
21 forward to getting a lot of good information on the
22 record. Thank you.

23 JUDGE WAHL: Commissioner Tony Clark.

24 COMMISSIONER CLARK: Just welcome,
25 everyone, this morning. Thank you for being here.

1 These rate cases are really where the rubber meets
2 the road for the Commission. It's probably the one
3 opportunity more than any other that we have an
4 opportunity to address concerns, set policy for the
5 future and really have a pretty dramatic impact on
6 a large number of people within North Dakota and a
7 large number of businesses within out state, so I
8 know I speak for all the Commission when I say we
9 do take these matters very seriously, probably more
10 seriously than just about any kind of case that we
11 do, and we've all prepared for this thoroughly. So
12 thanks for all the submitted testimony. I look
13 forward to a very thorough and good hearing.

14 JUDGE WAHL: Commissioner Kevin Cramer.

15 COMMISSIONER CRAMER: Just add my welcome
16 and good morning to everybody. As Commissioner
17 Clark said, these are our opportunities to not
18 only, I guess, look at all of the evidence, hear
19 all of the testimony and determine whether a
20 company should get 20 million more dollars from
21 North Dakota ratepayers or not, but also to explore
22 at a higher level and a larger sense the policies
23 that drive us. We are as a Commission in many
24 respects at somewhat of a disadvantage in that
25 regard because over the last several years the

1 legislature has diminished some of our ability
2 through the budget -- through the budgeting process
3 to do a lot of investigating in between rate cases,
4 so we like to take the opportunity during rate
5 cases to explore lots of issues, and we will no
6 doubt do that.

7 As we've said, and I hope you understand,
8 that we don't take this lightly, of course, any
9 more than certainly Xcel Energy does. We think
10 that asking for \$20 million from North Dakota
11 ratepayers is a really big deal, and so we will
12 explore the reasons for that rather thoroughly and
13 perhaps at times even rather aggressively. So we
14 appreciate the prefiled testimony. It is very good
15 testimony and we appreciate it a great deal, I will
16 say. It occurred to me as I was carrying it home
17 over the weekend and looking at -- I don't know --
18 somewhere probably around a foot or foot and a half
19 worth of Xcel testimony and the inch or so of
20 advocate's testimony, I thought that this looks
21 like a pretty fair fight, so we look forward to the
22 day and the next several days.

23 JUDGE WAHL: Thank you, Commissioners.

24 The record will show that it is a little
25 after 8:00 a.m., June 23, 2008, the time and date

1 noticed for the hearing of the Northern States
2 Power Company electric rate increase application,
3 North Dakota Public Service Commission Case No.
4 PU-07-776.

5 The issues for this hearing are specified
6 by the Commission's notice of hearing dated March
7 26, 2008. Those issues are: First, what is the
8 value of NSP's property, used and useful, for the
9 service and convenience of the public in North
10 Dakota?

11 Second, what is NSP's rate of return on
12 its property, used and useful, for the service and
13 convenience of the public in North Dakota?

14 Third, what is a just and reasonable rate
15 of return on NSP's property, used and useful, for
16 the service and convenience of the public in North
17 Dakota?

18 Fourth, what rates and charges are
19 necessary to provide a just and reasonable rate of
20 return on NSP's property, used and useful, for the
21 service and convenience of the public in North
22 Dakota?

23 Fifth, are NSP's proposed rate schedules
24 designed in such a manner that they result in a
25 basis of charge to its customers that is just and

1 reasonable without discrimination?

2 And, sixth, other relevant information or
3 proposals concerning the proceeding.

4 Counsel, please state your appearance for
5 the record. Ms. Hertzler.

6 MS. HERTZLER: Megan Hertzler, assistant
7 general counsel at Xcel Energy, and with me here
8 today is my outside counsel, Michael Bradley of the
9 law firm of Moss & Barnett.

10 JUDGE WAHL: Mr. Bahr.

11 MR. BAHR: Doug Bahr with the North Dakota
12 Office of Attorney General, representing staff.

13 JUDGE WAHL: And also, please, Mr. Bahr,
14 identify each member of the Commission staff who
15 will participate for the hearing.

16 MR. BAHR: There are no staff that will be
17 testifying.

18 JUDGE WAHL: But is Mr. Diller
19 participating for the hearing?

20 MR. BAHR: Mr. Diller, when he arrives,
21 will be with me at counsel table, but he will not
22 be participating by asking questions.

23 JUDGE WAHL: No, I understand that, but he
24 will be assisting you for the hearing. And then
25 there's also what, two other members of the

1 Commission's advocacy staff besides Mr. Diller?

2 MR. BAHR: Your Honor, I'm not actually
3 sure which ones have assisted Mr. Diller.

4 JUDGE WAHL: Oh, I'm sorry. That's fine.
5 That's fine. Is there anyone present other than
6 those who will testify on behalf of Northern States
7 Power or the Commission's advocacy staff who have
8 come to the hearing to offer any information or
9 comment concerning Northern States Power's electric
10 rate increase application?

11 Ms. Hertzler, you may proceed when you're
12 ready.

13 MS. HERTZLER: Your Honor, just a couple
14 pieces of housekeeping before I call our first
15 witness. We had sent a letter in to you on June
16 20th with an order of witnesses indicating that a
17 number of witnesses will be testifying by phone.
18 I'd like to identify them now and just confirm that
19 this is okay with the Commissioners, as well as to
20 get their response with regard to one witness,
21 which at this point we have not scheduled for
22 testimony.

23 The list of witnesses that will testify by
24 phone is Mr. Allen Krug, Ms. Jannell Marks, Mr.
25 Marvin McDaniel, Mr. --

1 COMMISSIONER WEFALD: Can you go slower,
2 please?

3 MS. HERTZLER: Yes. Mr. Marvin McDaniel,
4 Mr. Stephen Beuning, Mr. Charles Bomberger, Mr.
5 Walt Grivna, Mr. Steve Huso, and Mr. Phil Zins.
6 The majority of these witnesses did not submit
7 rebuttal testimony in this proceeding, but we are
8 going to make them available by phone for
9 questioning. It is my understanding that advocacy
10 staff does not have questions for those witnesses.

11 In addition to this, Dr. James
12 VanderWeide, who was our ROE expert, we have not
13 called him at this time because we have a
14 stipulation with staff with regard to the overall
15 rate of return and return on equity. However,
16 should the Commissioners have any questions, I
17 would be happy to make him available sometime
18 during this hearing, if you'd just let us know.

19 Do the Commissioners have any concerns
20 with those witnesses testifying by phone?

21 COMMISSIONER CLARK: No.

22 COMMISSIONER WEFALD: No.

23 MS. HERTZLER: Would the Commissioners
24 wish to speak to Dr. VanderWeide?

25 COMMISSIONER WEFALD: We'll determine that

1 during the hearing.

2 MS. HERTZLER: Fair enough. I'm going to
3 be calling to the stand Mr. Kent Larson. Mr. Kent
4 Larson is our policy witness here on behalf of the
5 company and his testimony sort of covers the whole
6 scope of what the case is about, so Mr. Larson will
7 have some summary of his testimony. Our other
8 witnesses will not be summarizing their testimony,
9 but will just be here for the availability of the
10 Commission and for cross. So we will call Mr. Kent
11 Larson.

12 JUDGE WAHL: Mr. Larson, as you are
13 doubtless aware, your testimony is required to be
14 under oath and I'm required by law to advise you
15 regarding perjury before administering the oath.
16 Perjury is a false statement of material fact which
17 you do not believe to be true; in other words,
18 generally speaking, a lie. In North Dakota perjury
19 is a Class C felony, punishable by a fine up to
20 \$5,000, imprisonment for a period of up to five
21 years, or both. Will you raise your right hand,
22 please?

23 **KENT LARSON,**
24 being first duly sworn, was examined and testified
25 as follows:

1 JUDGE WAHL: Ms. Hertzler.

2 MS. HERTZLER: Thank you, Your Honor.

3 DIRECT EXAMINATION

4 BY MS. HERTZLER:

5 Q. Mr. Larson, if you could state for the
6 record your name and title.

7 A. Kent Larson, regional vice president,
8 Northern States Power.

9 Q. And did you submit testimony in this
10 proceeding?

11 A. Yes, I did.

12 Q. Did you submit direct testimony?

13 A. Yes.

14 Q. And did you submit rebuttal testimony?

15 A. Yes.

16 MS. HERTZLER: Your Honor, I have
17 previously marked as Exhibits 4 and 5 Mr. Larson's
18 direct and rebuttal testimony. I'm sorry. We had
19 previously marked as 3 and 4 Mr. Larson's direct
20 and rebuttal testimony. I would like to move
21 those.

22 JUDGE WAHL: I have it as 4 and 5.

23 MS. HERTZLER: Yeah, I had it as 4 and 5,
24 too. My apologies. My co-counsel -- yes, it is 4
25 and 5.

1 JUDGE WAHL: All right. You're offering
2 it?

3 MS. HERTZLER: I am, Your Honor.

4 JUDGE WAHL: Mr. Bahr?

5 MR. BAHR: No objections.

6 JUDGE WAHL: Exhibits 4 and 5 are
7 received.

8 Q. (MS. HERTZLER CONTINUING) Mr. Larson,
9 would you like to summarize your testimony, please?

10 A. Yes. Xcel Energy and NSP have had a long
11 history of working together with the North Dakota
12 PSC to provide very good service at a reasonable
13 price to the customers here. It's a priority for
14 us. If you take a look at recent years, it's no
15 exception to that.

16 Actually, in 2007 -- we do a rate
17 comparison to regional utilities, and in 2007 for
18 residential customers our rates were of the lowest
19 of the 28 or 29 regional utilities. So from a rate
20 perspective residential customers are treated well.
21 Customer satisfaction has always been very strong
22 in North Dakota, one of the best in the company,
23 and last year our actually overall customer
24 satisfaction was 96 percent positive. So our
25 customers are satisfied with our overall service.

1 Another key component is our reliability.
2 Last year our average SAIDI, which is a measure of
3 average minutes interrupted for an average
4 customer, was 70 minutes, which is very, very
5 strong. And when we did have the PLUS Plan with
6 you for five years, we met or exceeded the
7 reliability targets nine out of ten times, so we've
8 had a good history of good reliability.

9 On top of that, if you take a look at our
10 community support, we've got many people involved
11 in the community. Mark Nesbit, Judy Pockerd, Kathy
12 Oz are involved at the state level and the local
13 level in key leadership positions. On top of that
14 we donate more than \$300,000 a year between
15 economic development contributions, so we're a
16 strong community player. You might ask how we can
17 afford to do that with the low rates that we have.
18 And one of the major reasons is we've got low
19 system costs and, also, only about 5 percent of our
20 corporate overheads end up supporting this.
21 They're spread across other jurisdictions.

22 As you know, we've got an integrated
23 system that delivers the power here. We share the
24 resources across the northern part of the company.
25 We have one of the most diverse systems of any

1 utility in the country. We have about 45 percent
2 coal, 28 percent nuclear, the rest being wind,
3 hydro, natural gas and biomass. A lot of other
4 utilities would love to have that kind of portfolio
5 of energy. We're fortunate to have it. What we do
6 is we provide that to the northern part of the
7 system. About 75 percent of it goes to Minnesota,
8 15 percent to Wisconsin and the Michigan area, and
9 5 percent to North Dakota, 5 percent to South
10 Dakota.

11 With that large pool of energy, we're able
12 to have a lot of diversity. If you take a look at
13 the nuclear plants, they supply about 1,500
14 megawatts of power. If you think about the North
15 Dakota load being about 500 megawatts, there's no
16 way you could justify building a nuclear plant or
17 even a large coal plant for 500 megawatts. So the
18 advantages of the integrated system is low cost and
19 you can build other plants that wouldn't be
20 possible otherwise.

21 If you think about that integrated system,
22 it provides huge cost advantages and also hedges
23 against future price increases, but it also has to
24 work like a partnership. It's not an a la carte
25 plan where you can pick and choose each one of

1 those. You really need to either be in the plan or
2 out of it. And it does provide great benefits, but
3 it also provides a lot of cooperation.

4 We know that the Commission has concerns
5 with future resource planning and how that's
6 adopted. We did make an offer to meet with you or
7 your staff to take a look at how we could improve
8 the resource planning in the future. In particular
9 our initial offer would be that for three months
10 prior to filing future resource plans, we'd
11 actually call in all the Commissioners and all the
12 staff to work on a joint planning process to get
13 better buy in and support. We think that would be
14 beneficial. We do think it provides huge benefits
15 for the customers in North Dakota.

16 As you mentioned earlier, we asked for a
17 \$20 million increase in this case. We're very
18 comfortable with the request that we have. We're
19 comfortable we have a solid rate case and it's well
20 justified. As you mentioned earlier, Commissioner
21 Wefald, this is the first time in 15 years we've
22 been in for a rate increase. It's been a long
23 time. We've had some minor adjustments up or down
24 with the PLUS Plan and a few other things, but this
25 is the first major case.

1 When we got the staff's recommendation
2 back, rather than asking for a \$20 million
3 increase, they denied that completely and
4 recommended a \$200,000 reduction. This kind of
5 funding won't fund the improvements we need in our
6 system to deliver the energy to our customers in
7 the long run. We've got an obligation to provide
8 good service, good reliability, support the
9 communities, and provide it at a fair cost. We
10 also have an obligation in every state we serve to
11 provide a fair rate to our investors. If you take
12 a look at the dollars that were recommended in this
13 case, they'll provide probably a 2 to 3 percent
14 return. I don't know how many people in this room
15 are saving for their retirement, but nobody I know
16 will invest in a 2 percent -- 2 to 3 percent return
17 for the long run. It's just not adequate. It
18 won't bring investors here. We owe it to our
19 customers to do a good job here. We owe it to our
20 shareholders to do a good job, also, and it needs
21 to be a partnership there.

22 We think that for us to be successful in
23 North Dakota, continue to provide the service that
24 we have, the reliability that we have, that the
25 funding level is just not adequate to do that going

1 forward from an investor point of view and we won't
2 have the funds to continue to provide the service
3 that our customers have enjoyed for a long time.
4 We think the \$200,000 reduction is completely
5 inadequate to run our business in North Dakota.
6 What we would ask is, we'd like to work with the
7 Commission to find a reasonable solution between
8 you and us so that we can continue to provide the
9 service reliability to our customers here and
10 provide a fair return for our investors. That
11 concludes my remarks.

12 MS. HERTZLER: Your Honor, Mr. Larson is
13 available for questions.

14 JUDGE WAHL: Mr. Bahr.

15 MR. BAHR: Thank you.

16 **CROSS-EXAMINATION**

17 **BY MR. BAHR:**

18 Q. Mr. Larson, based upon page 14 of your
19 direct testimony, you say that one of the primary
20 drivers of your rate increase application includes
21 increasing investments in your generation assets,
22 which would include the completion of two out of
23 three coal power plant rehabilitation and
24 repowering projects. Those projects are known as
25 the Minnesota Metro Emissions Reduction Project, or

1 MERP; correct?

2 A. Yes.

3 Q. Now, according to your testimony, also,
4 MERP is a voluntary program initiated by NSP on its
5 own?

6 A. Yes. Actually, the plants that we're
7 talking about are older plants. The King plant was
8 basically getting close to the end of its life.
9 The boiler in it was inadequate. And the High
10 Bridge plant that we're talking about was
11 originally built in 1924 and the useful life on
12 that is basically gone. So it was a project that
13 we needed to do to upgrade our system.

14 Q. Mr. Larson, this will go a lot smoother if
15 I ask the questions and you simply respond to those
16 questions. I will do followup so you can explain
17 things as needed.

18 MS. HERTZLER: Your Honor, I think he was
19 answering the question.

20 Q. (MR. BAHR CONTINUING) So my question was
21 that this was a voluntary action on behalf of NSP.

22 A. Yes, it was projects we needed to do.

23 Q. And voluntary means it's something that
24 you decided on your own to do, you're not coerced
25 or regulated, required to do that?

1 A. Yes.

2 Q. So I am correct that there --

3 A. I would like to correct that a bit.

4 There's part of it that -- if you take a look at
5 once you enter into those projects, there's
6 environmental requirements that you need to meet to
7 be able to build a project, in particular with the
8 King plant. If you do a major upgrade on the King
9 plant like we did, you also need to upgrade it,
10 otherwise -- from a federal perspective, you need
11 to make improvements from an environmental
12 perspective and also from a state perspective. So
13 part of it's voluntary, part of it's required.

14 Q. Data request 3-29, I'm going to read your
15 response to that and then just a few follow-up
16 questions. It states, The 2006 Minnesota
17 legislature adopted the Emissions Reduction Rider
18 Act during the special session following
19 adjournment of its regular session. During the
20 regular session the legislature considered, but did
21 not enact, new environmental requirements that
22 would have applied to electric generating
23 facilities. Prior to the commencement of the
24 special session, we worked with stakeholders on a
25 voluntary, rather than mandatory, approach to

1 achieving emissions reductions modeled after the
2 voluntary emissions and reductions approach
3 successfully used in Colorado.

4 Now, my question is, this doesn't sound
5 voluntary. It sounds like the legislature said
6 we're going to do this. You have the choice of
7 coming in and doing it with us or we will impose it
8 on you.

9 A. We actually did a study of our system and
10 determined that we needed to upgrade three of our
11 plants: The King plant, which was nearing the end
12 of its life. The High Bridge plant was built in
13 1924 and was probably past the end of its useful
14 life, as well as the Riverside plant that was built
15 after the turn of the century. So we developed a
16 need as far as what was needed for system
17 improvements, and then after we developed that need
18 and understood it, we went to the legislature to
19 come up with funding so we could secure the funding
20 to support the project for the long term.

21 Q. And why would you go to the legislature to
22 do that instead of to the Commission?

23 A. If you take a look at across the country,
24 if you think about the expenditures, this was about
25 a \$1 billion cost. About 75 percent of the cost

1 was coming from Minnesota, about 750,000. Most
2 utilities across the country are looking to get
3 some kind of an agreement, they'll get recovery for
4 projects before they actually start construction
5 for the major parts of that. In this case the
6 major part of the construction cost was going to be
7 funded by Minnesota. We felt the legislature was
8 the best source of funding for that -- to make that
9 decision.

10 Q. What are the other benefits of going to
11 the legislature instead of the Commission?

12 A. I think ultimately the legislature has
13 overall authority from the state perspective
14 compared to the Commission, so if the legislature
15 makes that decision, then they set the policy for
16 the state.

17 Q. When you go through the Commission, is
18 there an opportunity for other people to
19 participate in that process?

20 A. There's an opportunity for people to
21 participate in both processes. I've witnessed in
22 Minnesota and also here that there's substantial
23 participation in either process.

24 Q. But through the Commission process, there
25 are administrative hearings where testimony is

1 taken and other parties have the opportunity to
2 participate; correct?

3 A. There's a process in each state -- in each
4 branch and there are hearings at the Commission
5 level.

6 Q. Now, I think we're all familiar with what
7 the -- the various plants that are involved in
8 this. The Riverside plant is not part of this rate
9 case; correct?

10 A. That's correct.

11 Q. When will the Riverside plant be
12 completed?

13 A. The Riverside plant will be completed in
14 2009.

15 Q. When do you anticipate filing a cost
16 recovery for the Riverside plant?

17 A. In North Dakota we've actually got --
18 depending on the outcome of this case depends on
19 when we'll file our next rate case, so it's really
20 undetermined. We asked for \$20 million in this
21 case. To recover other investments as well as that
22 depends on the outcome of this case. If we got the
23 \$200,000 reduction, I'm sure we'd be back in very
24 soon. If we didn't, we'll have to evaluate and it
25 will be determined by what our rate of returns are

1 going forward.

2 Q. Now, do you understand that NSP can choose
3 its test year and use a projected test year
4 according to the laws of North Dakota?

5 A. Yes.

6 Q. The King, High Bridge and Riverside
7 plants, where are they located?

8 A. The King plant is in Stillwater, the High
9 Bridge plant is in St. Paul, and the Riverside
10 plant is in Minneapolis. Actually, from a
11 strategic point of view, they couldn't be located
12 in a better place. The King plant is actually
13 right on the border between Minnesota and
14 Wisconsin, so from a support point of view, the
15 plant is actually located in the best place it's
16 needed from a transmission point of view. If that
17 plant were to actually go away, we'd need to build
18 another plant very close to that, and the cost of
19 that plant would be at least twice as much as the
20 plant that we rehabilitated and refurbished for
21 another 25 years.

22 If you take a look at the St. Paul plant,
23 it's right next to one of our major load centers,
24 and it's also in a location where we didn't need to
25 build additional transmission to get to that. We

1 also added capacity at the King plant, about 270
2 megawatts, so the location is very important, as
3 you mentioned. The King plant we added about 60
4 megawatts of capacity. And then the Riverside
5 plant is actually in Minneapolis, right next to a
6 major load center where there's transmission
7 capacity, too, and we added additional capacity.
8 If you look at all four of those, we added 400
9 megawatts of capacity.

10 Q. Mr. Larson, I'm not trying to be rude, but
11 most of this is in your direct testimony and so I
12 believe you're just repeating. If you would be
13 able to limit your responses to my actual question,
14 that would be appreciated.

15 Now, one of the benefits of MERP
16 legislation is that it allows NSP to pass through
17 capacity increases of up to a hundred megawatts to
18 customers as long as it isn't an environmental
19 qualifying facility; is that correct?

20 A. That was one of the -- one of the
21 requirements, but as you mentioned, in the High
22 Bridge plant we actually did add additional
23 capacity there. We added 270 megawatts because it
24 was cost-justified, so we were able to do what was
25 economically beneficial. We were able to find a --

1 we were able to find a system that was -- due to a
2 bankruptcy that was available at a lot lower cost
3 and added additional capacity there for a pretty
4 economical price.

5 Q. You just mentioned the High Bridge plant
6 did go beyond the hundred-megawatt limit?

7 A. Yes.

8 Q. So you're able to recover from the
9 Minnesota ratepayers?

10 A. Yes, a portion, the 75 percent that it's
11 assigned, not a hundred percent of the cost.

12 Q. Tell me the process that NSP went through
13 to make that recovery.

14 A. We actually -- actually, I'd have to have
15 somebody else define that process better than I
16 can.

17 Q. Who would that be?

18 A. Could possibly be Betsy Engelking.

19 Q. Now, NSP wrote the initial draft of the
20 Emissions Reduction Rider Act passed by the 2006
21 Minnesota legislature; correct?

22 A. Yes.

23 Q. Was that patterned after the Denver Metro
24 MERP?

25 A. It was basically patterned after the

1 Denver Metro MERP -- similarities to that.

2 Q. Now, when MERP was first initiated in
3 Denver, was that done after legislation enabling
4 it, or was that through a commission process?

5 A. Actually, I don't know the answer to that
6 question.

7 Q. Who of your witnesses would know about
8 that?

9 A. I'm not sure. Betsy Engelking.

10 Q. So are you not the one to ask questions
11 about the Denver MERP? Am I accurate on that?

12 A. That's correct. Betsy Engelking would be
13 a better source of information.

14 Q. With regard to the Minnesota project, did
15 NSP seek any North Dakota legislation regarding
16 that?

17 A. No, we did not.

18 Q. Were there any discussions regarding doing
19 so?

20 A. We had discussions -- our primary
21 discussions were with the Commission where we gave
22 updates on the project. We actually took the
23 Commissioners on tours of the power plants so
24 they'd understand the condition of the plants. I
25 think Diller actually took -- Mike Diller actually

1 took a tour of the plants, too. But more the
2 discussions were with the Commission to help them
3 understand the project better.

4 Q. You mentioned earlier that in Minnesota
5 you went through the legislative process because of
6 the importance of them making these policy
7 decisions. Wouldn't that be true in North Dakota,
8 also?

9 A. Each state has its own unique qualities
10 and we don't necessarily use the standard process
11 with each one of them. And in this case we felt
12 the best approach was to work with the Commission.

13 Q. Can you explain to me why? I guess I
14 didn't understand why. What are the unique
15 qualities about North Dakota that you would bypass
16 the legislature?

17 A. I wouldn't say that we bypassed the
18 legislature. We just chose to work with the
19 Commission. We've had a good, strong working
20 relationship with them. We were fortunate to have
21 them actually take the time to tour the plant,
22 which we appreciated them taking the time, and we
23 felt that if we could help them understand the
24 project, that it would be successful from that
25 respect.

1 Q. Why didn't NSP voluntarily refurbish or
2 clean up these plants prior to the legislation?

3 A. You're always evaluating your system to
4 determine when you need to refurbish plants and
5 that, and at this time we just made a decision that
6 all three of them together would make a good
7 package. We evaluated our overall system needs and
8 what was needed there. Betsy Engelking would be
9 able to go into more details on that.

10 Q. But you determined absent the legislation
11 you would not do that, you wouldn't make these
12 changes?

13 A. I can't answer. I can't tell you whether
14 we would or wouldn't have. We were able to get the
15 legislation and so that was a funding process that
16 was available.

17 Q. So had there been any planning if MERP was
18 not passed in Minnesota when these changes would
19 have been made? Have there been discussions about
20 that?

21 A. Can you repeat that again, please?

22 Q. If MERP had not been passed, did you have
23 a strategic plan as to when these changes to these
24 plants would have been made?

25 A. I can't tell you exactly when they would

1 have been made, but I can tell you that all three
2 plants were in need of refurbishment and so we
3 would have had to look at other alternatives to
4 fund the projects and get that passed. And the
5 approach we took was successful, so we didn't have
6 to go to other approaches.

7 Q. So there was not a timeline -- specific
8 timeline to do that if this legislation was not
9 passed?

10 A. We had a time that we wanted to
11 rehabilitate the three projects here and we worked
12 that plan to see if we were successful, and if that
13 wouldn't have been successful, we would have had to
14 develop other alternatives.

15 Q. And my question is, did you have
16 alternatives already developed as to when you would
17 do these things?

18 A. I can't -- Betsy Engelking might be able
19 to answer that question better.

20 Q. Where does the power you have to serve
21 Minot come from?

22 A. We operate an integrated system, so if you
23 take a look -- that's what I discussed when I first
24 opened up, is we have about 10,000 megawatts of
25 load across our system, and there isn't any

1 particular energy that goes from one place to
2 another, so it's a shared system. I will say that
3 in North Dakota about 25 percent of the energy that
4 is used in North Dakota -- not necessarily used in
5 North Dakota, but proportionately we purchase about
6 25 percent of North Dakota's energy here. That
7 doesn't necessarily mean that energy comes from
8 North Dakota, though. Our system is integrated and
9 it's shared across the system similar to what I
10 mentioned. Part of it comes from the nuclear power
11 plants, which is very low cost, part of it comes
12 from the coal, hydro, and it's a mixture of
13 everything.

14 Q. That 25 percent equivalent that's
15 purchased, is there a particular place that that is
16 purchased from?

17 A. There's about -- not a particular place.
18 We have agreements with -- we have agreements with
19 two other utilities.

20 Q. And who are they?

21 A. Great River Energy and Minnkota Power.

22 Q. But as I understand your testimony,
23 there's no way to separate where that energy is
24 going, for example, when you purchase it from Great
25 River Energy?

1 A. That's correct.

2 Q. NSP Energy is a holding company; correct?

3 A. Xcel -- we are a holding company overall
4 with four operating companies, and NSP-Minnesota is
5 one of the operating companies.

6 Q. You're familiar with the Public Utility
7 Holding Company Act?

8 A. Fairly familiar.

9 Q. Was it in effect when NSP and New Century
10 Energy merged?

11 A. Yes.

12 Q. Were you aware that a proposed merger
13 under that act at that time had to be
14 interconnected as one utility in order to merge?

15 A. Yes.

16 Q. Now, at the time of the merger, New
17 Century Energy was comprised of both the Public
18 Service Company of Colorado and Southwestern Public
19 Service Company; correct?

20 A. Yes.

21 Q. Those two companies were interconnected?

22 A. At the time they weren't interconnected.
23 They had plans to build a transmission line from
24 Colorado to Texas, which has been completed since
25 then.

1 Q. Do you know how much of the Colorado MERP
2 project had been recovered from NSP's Texas and New
3 Mexico ratepayers?

4 MS. HERTZLER: Objection, Your Honor. I'm
5 not sure of the relevance here of this line of
6 questioning. It's beyond the scope of Mr. Larson's
7 testimony.

8 JUDGE WAHL: Mr. Bahr.

9 MR. BAHR: The questioning is to compare
10 the policy of how North Dakota is being treated
11 based upon Minnesota MERP with how the customers
12 were treated with regard to Colorado MERP.

13 JUDGE WAHL: This is going to be followed
14 up in the Commission advocacy staff's response?

15 MR. BAHR: It will be as appropriate.

16 JUDGE WAHL: Overruled.

17 THE WITNESS: Please state the question
18 again.

19 Q. (MR. BAHR CONTINUING) You bet. The
20 question was, how much of the Colorado MERP
21 projects have been recovered from NSP's Texas and
22 New Mexico's ratepayers?

23 A. We actually operate as a holding company,
24 as I mentioned earlier, and I'll describe how that
25 works so that you better understand the overall

1 picture. On the NSP system we actually operate an
2 integrated system that also includes Wisconsin and
3 Michigan. Across that Minnesota pays 75 percent of
4 transmission and generation, Wisconsin-Michigan
5 there's an agreement there that they pay about 15
6 percent, and 5 percent to North and South Dakota.
7 If you take a look at that Colorado, that's
8 actually operated as an operating company, also, so
9 if you take a look at that project, it's my
10 understanding that basically they develop their
11 rates for that jurisdiction. And then if you go to
12 Texas and New Mexico, that's another operating
13 company that develops their overall rates. So
14 there's corporate overheads that are shared between
15 the group. There's purchasing opportunities.
16 That's one of the reasons we can end up keeping our
17 costs lower, because from a corporate level
18 actually there's a lot of costs shared. But from
19 an operating, generation, transmission,
20 distribution point of view, it's really at the
21 operating company level. There are engineering
22 groups that support across the company to save
23 money, also, that have some allocations there.

24 Q. So would the answer to my question be that
25 none? Is that the answer?

1 A. None of the --

2 Q. Because it's a different operating
3 company?

4 A. Yes. And it also does not have an
5 integrated system, either.

6 Q. In this case North Dakota's proportion of
7 MERP is being asked to be charged to North Dakota
8 ratepayers; correct? That's a simple summary?

9 A. That's correct.

10 Q. I'm going to ask you just some questions
11 about MERP and the question -- I'm going to
12 emphasize the word "most" in these questions.

13 Which state benefits the most from the
14 improved emissions upgrades, Minnesota or North
15 Dakota?

16 A. I would say that all of them benefit. If
17 you take a look at the King plant and you take a
18 look at the refurbished costs of that, it was
19 substantially lower than the other alternative of
20 building a new plant. Building a new plant would
21 easily -- easily would have cost twice as much as
22 that. So from a financial perspective, all states
23 benefited equally from that, and that's probably
24 one -- that's really what we're here to talk about
25 mostly in this case, is the financial impact of

1 that project. If we would have replaced that
2 plant, we would have had to build a new plant in a
3 similar location, we probably would have had to
4 build new transmission to do that, and it would
5 have been two to three times the cost.

6 Q. With regard to where the facilities are
7 actually located, would you agree that Minnesota
8 benefits more?

9 A. Not from a financial perspective, no, I
10 would not.

11 Q. How about with regard to the environmental
12 issues, such as the heat dispensation into the
13 waterways, would you agree that Minnesota benefits
14 more?

15 A. It depends on -- it depends on how you
16 look at the environmental requirements going
17 forward. I think we all know that on a national
18 basis, there's going to be substantially more
19 requirements from an environmental perspective than
20 what there are today, and it's really been our job
21 all along to be slightly ahead of the curve on
22 those. History has shown us that being ahead of
23 the curve rather than waiting for mandates is
24 substantially less costly, to supply materials
25 better, and so from an environmental perspective

1 costwise, we think that all states benefited
2 equally from that, too.

3 Q. Would you agree that the purpose of a
4 jurisdictional cost-of-service study is to allocate
5 costs between jurisdictions for regulatory
6 purposes?

7 A. Yes.

8 Q. Would you also agree that one of the
9 purposes of such a study is to allocate to a
10 particular state only the costs that are incurred
11 for the purposes of providing service to that
12 state?

13 A. Would you repeat the question again,
14 please?

15 Q. Would you agree that one of the purposes
16 of that study also is to allocate to a particular
17 state only the costs that are incurred for the
18 purposes of providing service to that state?

19 A. I would agree, but I'd also say that the
20 integrated system is part of those costs.

21 Q. And how about a customer class
22 cost-of-service study, what's the purpose of that?

23 A. I think -- I think actually Anne Heuer
24 could probably answer that question better than I
25 can.

1 Q. Generally speaking, would you agree that
2 the purpose of a customer class cost-of-service
3 study is to allocated costs between the various
4 customer classes?

5 A. Yes.

6 Q. And the purpose of that study is also to
7 allocate costs to the various customer classes
8 based upon the cost incurred to provide each class
9 with service?

10 A. Yes.

11 Q. So the primary purpose of both the
12 jurisdictional and customer class cost-of-service
13 studies, both of which are necessary for NSP to
14 file a rate case with the PSC, is to assign costs
15 to the cost causers? You would agree with that?

16 A. No. I'd say that -- I'd say that the
17 primary benefit is to assign costs to the
18 benefactors of the costs. If you take the --
19 whoever is receiving the benefits are really the
20 people who should pay for the cost of it. And this
21 case with MERP in particular, all customers
22 benefit.

23 Q. Just reviewing things that you said
24 someone else should answer, so I don't want to ask
25 you those questions.

1 Let's talk a minute about natural gas
2 prices. In response to one of the requests for
3 information, this is number 3-25, NSP states that
4 its decision to repower the High Bridge plant with
5 natural gas instead of coal is more than a simple
6 comparison of price. Then it references Kent
7 Larson's testimony saying that that includes
8 dispatch flexibility, environmental impacts and
9 supply portfolio diversity as key factors. That is
10 your understanding; correct?

11 A. Yes.

12 Q. Now, with regard to natural gas prices,
13 when deciding to convert High Bridge to a natural
14 gas plant -- this is NSP's response to number
15 3-25 -- it indicates that NSP assumed the cost of
16 gas to be \$4.668 per MMBTU beginning in 2004 and
17 then escalating at about 2 percent a year
18 thereafter. What was the source that NSP used for
19 this price?

20 A. I'm not sure what the source was.
21 Possibly Betsy Engelking would know.

22 Q. Based upon the response to request 3-25,
23 it was assumed that the 2008 natural gas prices
24 would be \$5.227. To the best of your knowledge, is
25 that what the prices are averaging now?

1 A. Actually, if you take a look at the energy
2 industry as a whole, all prices have gone up
3 substantially. I don't think anybody thought that
4 the price of gasoline would -- I saw last night it
5 was 4.09. If you take a look at the cost of coal,
6 if you take a look at the cost of uranium, even
7 though our lowest-cost plant is our nuclear plant,
8 the cost of uranium has gone from in the mid teens
9 just a few years ago, and I think last year it
10 peaked out around \$180, it went up more than ten
11 times over a few-year period. So all fuel sources
12 have gone up substantially, and natural gas has
13 gone up with them.

14 Q. And do you know where natural gas is now?

15 A. I believe it's the 11 to \$12 range right
16 now.

17 Q. And you had estimated a little bit over
18 \$5; correct?

19 A. We estimated for all of our fuels
20 substantially lower, so all fuel costs have gone up
21 substantially higher than I think anybody expected.

22 Q. Of all the costs that go into generating
23 electricity from natural gas, where would the cost
24 of fuel rank?

25 A. If you take a look at our overall cost to

1 our customers in our supply portfolio, natural gas
2 represents less than 10 percent of the overall
3 energy costs. So from a customer perspective, it's
4 somewhat small, but you also need natural gas to
5 operate with the rest of your system. If you take
6 a look at the High Bridge plant, we were using the
7 High Bridge plant, a coal plant to balance out load
8 along with the Sherco plant and you really want to
9 run those baseline.

10 Q. Maybe my question wasn't clear. I'm
11 asking about actually using natural gas to generate
12 electricity. The cost of the natural gas, where
13 does that rank in the cost of generating the
14 electricity? Is that the number one cost, the
15 second cost?

16 A. It's a peaking plant, so base load costs
17 are the lowest cost, intermediate are the next
18 lowest cost, and peaking plants are always the
19 highest cost. You only run them for a smaller
20 portion of the year, so it is a high cost by plan
21 as opposed to a nuclear plant, which you run 24
22 hours a day, seven days, you want to be a lower
23 cost, because you don't want -- with a gas plant
24 you don't want to invest all that capital just for
25 a short period of time. So by design it is one of

1 the higher cost.

2 Q. What, in your understanding, is the most
3 abundant and available energy source within the
4 borders of the United States?

5 A. I think there's -- I think probably -- I
6 think there's adequate supplies of coal, uranium
7 and natural gas. If they'd open up more of the
8 offshore drilling, natural gas would even be more
9 plentiful than what it is right now, so it's a
10 matter of what you have access to.

11 Q. Would coal be the most available right
12 now?

13 A. Probably coal would be -- coal and
14 uranium.

15 Q. How much have the coal prices fluctuated
16 over the last 20 years?

17 A. Betsy Engelking would be able to answer
18 that question better than I can.

19 Q. Do you have information or are you
20 knowledgeable about how much natural gas prices
21 have fluctuated over the last 20 years?

22 A. Natural gas prices have -- I think if you
23 went back into the late '90s, they were in the \$2
24 range. Today they're in about the 11 to \$12 range.
25 They've been higher than that -- a few dollars

1 higher than that.

2 Q. Do you know if they're less consistent
3 than coal prices?

4 A. If you take a look at natural gas prices,
5 typically you buy those on the spot market as
6 opposed to long-term contracts today. Coal prices
7 are typically -- you sign long-term contracts for
8 those, and that's why I use coal for base load
9 where you produce most of your energy.

10 Q. So would the answer be correct that coal
11 is more stable priced typically?

12 A. I'd say that coal does not fluctuate on a
13 day-to-day basis as much as natural gas does. Long
14 term you would have to take a look at the overall
15 impacts. I think when you look at different fuel
16 sources, too, you have to look at both the
17 short-term and long-term impacts. One of the
18 things that we're trying to deal with is on the
19 federal level we know that there's going to be
20 changes from an environmental point of view and so
21 you have to think about how do you prepare your
22 system for that in the long run.

23 Q. Just give me a few minutes. I'm reviewing
24 things so I don't ask redundant questions.

25 Is the High Bridge gas facility a

1 combined-cycle turbine?

2 A. Yes.

3 Q. Would that be kind of the latest and best
4 in the turbine technology?

5 A. A combined-cycle turbine actually provides
6 higher efficiency than a single-cycle unit, so you
7 can get more energy out of it for the same amount
8 of gas compared to the single cycle.

9 Q. And what is the efficiency rating for
10 that, for like the High Bridge?

11 A. Betsy Engelking could give a better answer
12 exactly. I know roughly, but I'd rather have her
13 answer that.

14 Q. Based upon data requests, the response to
15 data request 3-27, the answer was about 46 percent.
16 Does that sound accurate to you?

17 A. Yes.

18 Q. And based upon your earlier testimony,
19 would that also depend on whether it's being used
20 as a base load or how it was being used?

21 A. Betsy Engelking can better describe the
22 operating characteristics of a natural gas turbine.

23 Q. So you don't feel comfortable testifying
24 regarding how it -- what kind of efficiency rating
25 it would have based upon how it's being used?

1 A. I'd prefer that Betsy Engelking would
2 answer that question.

3 Q. How about the Riverside gas plant which is
4 currently being built, do you know what kind of --
5 is it going to be an intermediate generating plant,
6 or how will it be used?

7 A. I would prefer that Betsy answer that
8 question, too. I will make one comment, though.
9 If you take a look at putting both the High Bridge
10 and Riverside plant in place, right now actually we
11 use part of the Sherco plant to do some of the load
12 following, which is not an efficient use of
13 resources. The Sherco plant is one of our lowest-
14 cost plants that we have on the system. With both
15 nuclear plants and Sherco plant, you want those to
16 run as much as you possibly can to get the most
17 efficient use out of them. And as we convert these
18 two plants to natural gas, we'll actually be
19 utilizing the Sherco plant more at full capacity
20 and these natural gas plants following load, it
21 will be a substantially better use of the system
22 overall. So we'll have an improved system
23 operation overall with that.

24 Q. Approximately how many megawatts of wind
25 does Xcel's Minnesota company have under contract?

1 A. I believe it's a little bit over a
2 thousand megawatts right now.

3 Q. And how many megawatts of wind does it
4 plan to have on line by 2025 to meet the renewable
5 portfolio standard?

6 A. We actually plan to have 4,000 megawatts
7 on line by then. We're in the process of
8 redeveloping our transmission system to allow
9 additional capacity out there to supply wind. You
10 may have read last week that we have one line
11 planned with the CapX group that goes from close to
12 the Twin Cities to Fargo, and we're recommending
13 that line actually be built to have the capability
14 of a second circuit. That was actually filed last
15 week. So we do see that there will be additional
16 wind on the system, and we feel that North Dakota
17 will play a major part of that. With this
18 additional transmission capacity, it will
19 definitely benefit us to have availability to wind
20 up here.

21 Q. Now, as I understand it, the wind is less
22 consistent because it depends on weather factors
23 whether it's available or not. Is that accurate?

24 A. I'd say that if you take a look at wind
25 capacity today versus 20 years ago, it's improved

1 substantially. Today's wind capacity that's coming
2 on line is more in the 40 percent capacity factor
3 range, which is pretty amazing, and it isn't as
4 consistent, so you really need to have both wind
5 and natural gas to offset each other. Typically,
6 the cost of wind is less than the operating cost of
7 natural gas, so it's a good match between the two
8 of them. Between the two they provide a good
9 energy source. If you looked at the wind we
10 brought on early on the system, it was close to the
11 3-cent range. We have that under contract. That's
12 substantially less than the cost we're paying MISO.
13 So if you think about the first 400 megawatts we
14 brought on at 3 cents, that's a very good resource
15 right now with the price of fuels going up
16 substantially. We feel it's a good hedge long
17 term, too.

18 Q. So based upon what you just said, will the
19 gas turbines be used kind of as a shadow of the
20 wind, so that when they're not working, you'll use
21 the gas to supplement?

22 A. Yes, in general. Not a hundred percent,
23 but in general that's the basic philosophy,
24 depending on other resources that are available at
25 the time, but basic philosophy is you use gas to

1 back up wind depending on the need at the time to
2 fill the peaks.

3 Q. I remember that we had a phone meeting a
4 few weeks ago and the issue of natural gas and
5 concerns with long-term supply was addressed. Are
6 you familiar with concerns about that?

7 A. I'd rather have Betsy Engelking answer
8 that question. I'm not familiar with the phone
9 call that we had a couple weeks ago. I wasn't
10 involved in that.

11 Q. She's more familiar with the resources of
12 natural gas and its availability than you are?

13 A. I'm somewhat familiar. There is natural
14 gas available, and actually if you take a look on
15 the federal level, there's more people talking
16 about doing offshore drilling, which there is
17 adequate supply there. There is adequate supply in
18 the Rockies, and then also on an international
19 basis. There's a substantial gas supply around the
20 world that you could liquefy and bring in, too.

21 Q. Now, would I be correct that the
22 integrated resource plan you filed with the
23 Minnesota Commission is the only IRP that you
24 developed? Is that accurate?

25 A. It's the only IRP we developed for the NSP

1 system.

2 Q. So there's nothing filed with other
3 jurisdictions that system is involved in?

4 A. It's my understanding we actually -- I
5 don't know if it's an actual filing, but we do
6 provide a copy of it at the minimum each time to
7 the North Dakota Commission.

8 Q. I'm sorry. Nothing different? You
9 provide the same IRP to the different
10 jurisdictions?

11 A. Is it the same, exact plan, is that what
12 you're --

13 Q. Yes.

14 A. The basis of it. We develop one
15 integrated plan for the NSP system which serves the
16 five states, and the basis of that plan is the
17 same. I'm not sure if there's a different cover
18 letter.

19 Q. Substantially the same?

20 A. Yeah, substantially the same.

21 Q. And then what, does the Minnesota
22 Commission approve it, or how does that work?

23 A. Yes, they do approve it.

24 Q. Were the MERP projects the least-cost
25 resource addition according to NSP's IRP at the

1 time?

2 A. If you looked at -- if you took everything
3 into account, the MERP plan was the least-cost
4 project that was available to us.

5 Q. And by saying taking everything into
6 account, what are you referring to?

7 A. If you take everything into account,
8 system control -- system control, fuel costs,
9 location of transmission, being able to upgrade the
10 system to add additional capacity. Betsy Engelking
11 can get into more details on that, though.

12 Q. Now, in information request 3-5 staff
13 expressed some concern that your IRP model only
14 included a future coal-based resource option that
15 includes carbon capture and storage and assigns a
16 \$9- to \$40-per-ton charge for CO2. They also
17 expressed concern over how this comports with North
18 Dakota law, because according to state law, the
19 Commission may not use, require the use of, or
20 allow electric utilities to use environmental
21 externality values in the planning, selection, or
22 acquisition of electric resources or the setting of
23 rates for providing electric service.

24 MS. HERTZLER: Point of clarification,
25 Your Honor. I don't believe you're on 3-5,

1 counsel.

2 JUDGE WAHL: 3-15.

3 MS. HERTZLER: 3-15?

4 MR. BAHR: Right. I'm sorry. Did I
5 misstate?

6 MS. HERTZLER: It was -- 3-5 was your
7 reference.

8 MR. BAHR: Okay. 3-15.

9 Q. (MR. BAHR CONTINUING) I can reread that
10 or you have it handy. So the staff's concern is
11 that the IRP does not comply with North Dakota law.
12 And I'm not asking you for a legal response, but
13 there's nothing that was filed differently that
14 would meet staff's concern; is that correct?

15 A. Can you state the question again?

16 Q. Based upon this information request from
17 staff, they were concerned that your IRP did not
18 comply with North Dakota law, and I'm just trying
19 to confirm that there's nothing else that has been
20 filed to attempt to comply with that.

21 A. We believe we are in compliance with North
22 Dakota law.

23 Q. Do you have an IRP that incorporates
24 existing coal technology instead of future based --
25 coal based resources?

1 A. Betsy Engelking would be able to better
2 answer that question than I can.

3 MR. BAHR: I'm not done, but can we take a
4 five- or ten-minute recess?

5 JUDGE WAHL: We may. We'll be in recess
6 for ten minutes. Let's make that 10 after 9.

7 (Recess taken.)

8 JUDGE WAHL: All right. Let's be in
9 order. Mr. Bahr, you may proceed.

10 MR. BAHR: Thank you, Your Honor.

11 Q. (MR. BAHR CONTINUING) Mr. Larson, when
12 NSP prepared its IRP, it ran a coal-based option
13 using future based carbon capture and sequestration
14 technology; is that correct?

15 A. Actually, I'd rather have Betsy Engelking
16 answer that question. She's more familiar with the
17 planning part of that than I am.

18 Q. Would you agree that electric generation
19 is primarily driven by coal, nuclear and natural
20 gas?

21 A. On our system?

22 Q. On your system, first of all.

23 A. Primarily on our system, yes.

24 Q. And how about generally? Are there other
25 options that are used?

1 A. Wind is becoming a substantially bigger
2 portion throughout the country. I'd add that to
3 it. Hydro is another major -- major source. We
4 have some hydro, but not as much as some utilities
5 do.

6 Q. Do you believe the price of -- or do you
7 have any basis to believe that the price of natural
8 gas has an impact on the price of coal?

9 A. I believe that all the energy sources are
10 interrelated on cost prices, uranium, coal, even
11 wind. They're all somewhat interrelated.

12 Q. Based upon your experience, you're aware
13 that the price of nuclear fuel has increased
14 significantly in the last few years?

15 A. Yes.

16 Q. Do you have any opinion as to why that has
17 occurred?

18 A. Part of it is the price of -- part of it
19 is actually the price of other fuels, and the part
20 of it is we used to get a lot of uranium from
21 Russia. When they were taking some of their arms
22 out of service, we had agreement to take some of
23 their uranium, and that's actually gone away now so
24 the price of uranium has gone up since then. So
25 there's a couple factors. There's also people that

1 believe -- there's speculation on the uranium
2 market, too, so it's not all caused by the price of
3 natural gas. There's many factors that impact it.

4 Q. When you say they're all interrelated, if
5 you feel, you know, competent to testify regarding
6 this, what do you mean? How does one impact the
7 other?

8 A. In general, fuels tend to move up or down.
9 There's alternatives. Fuels act as alternatives
10 for other ones. Natural gas, coal, oil, uranium,
11 they supplement each other, so they are somewhat
12 interrelated from that respect. I'm not an expert
13 on it, but I do know that much.

14 Q. And when NSP determined that it did its
15 IRP and that it was going to be burning more
16 natural gas, did it consider that and how it would
17 impact the other fuel cost?

18 A. We actually took a look at the natural gas
19 supplies when we were looking at our MERP project,
20 and on a national or international basis, how much
21 gas we use really doesn't impact the overall
22 supply. We're pretty small. One of the things --
23 the bigger thing that we considered for our MERP
24 project is what's the supply into the area and
25 would it overload the pipelines on that area. So

1 that was one of the considerations that we
2 considered. On the national basis, these two
3 plants just aren't big enough to swing the market
4 one way or another.

5 Q. How about with regard to natural gas --
6 residence and places that use natural gas for
7 heating purposes, did you consider the impact it
8 would have on them?

9 A. Once again, we actually aren't big enough
10 to swing the entire U.S. market, and so it isn't
11 big enough. We still have a relatively modest
12 amount of our energy coming from natural gas, less
13 than 10 percent, which is pretty minimal. You need
14 some natural gas on the system. You would never
15 use coal to supply your peak needs. The cost of
16 coal for peak energy would be extremely high
17 because it's only there for a portion of the time,
18 so you really need a mixture of all different
19 resources, and we're comfortable with the mix that
20 we have right now. We actually were using coal, as
21 I mentioned earlier, at the Sherco plant to ramp up
22 and down, which is not a good use of the Sherco
23 plant. So from an overall electric point of view,
24 it's a good mixture of resources.

25 Q. I don't have the source handy right now,

1 but I believe there was something from the
2 Department -- one of the federal agencies that said
3 95 percent of the recently created or upgraded
4 facilities are all using natural gas. Are you
5 aware of that trend?

6 A. I've seen some trends out there, and I
7 don't know that I would agree that it's 95 percent.
8 There's a lot of movement towards wind right now.
9 I don't know what the actual number is.

10 Q. Would you agree there has been a
11 significant trend to using more natural gas?

12 A. It's -- there's been more of a trend
13 towards using natural gas in the last 10 years.

14 Q. And so when you consider the impact of
15 just your company, do you consider the impact of
16 many other companies who may be doing the same
17 thing?

18 A. I think a lot of people look at natural
19 gas and look at the benefits of it. One, you can
20 get a plant built in pretty quick, short order. If
21 you look at the environmental impacts, it's pretty
22 low. If you take a look at what your needs are, if
23 your needs are in the peaking and intermediate
24 range, natural gas is a good resource. So I think
25 there's a lot of people looking at all those

1 factors and see that it's beneficial that way.

2 Q. And I guess your testimony is that there's
3 no concern with adequate supply?

4 A. Adequate supply of natural gas?

5 Q. Correct.

6 A. We don't see any short-term issues of
7 natural gas supply. And if you looked on the world
8 market, there's a lot of natural gas on the world
9 market that can be liquefied and brought to the
10 U.S. and there's actually being -- there's actual
11 LNG plants that are being built in the U.S. to
12 accept that right now, too.

13 Q. Does the IRP model include any
14 consideration of off-system sales that might be
15 made if a base load unit were built instead of
16 another intermediate or peaking unit?

17 A. Betsy Engelking would be able to answer
18 that question better than I can.

19 Q. What is the energy capacity market for
20 electricity right now?

21 A. Betsy would be able to better describe
22 that than I can.

23 Q. When is the coal plant most expensive to
24 ratepayers, the beginning years or later years?

25 A. There's two times a coal plant is the most

1 expensive. One is when you put a plant on line
2 because it's not fully depreciated, you end up with
3 a higher cost there. We're fortunate on our system
4 to have plants that are fairly well depreciated
5 that can supply low-cost energy. At the end of the
6 life it also gets very expensive, too, because you
7 have a lot of problems running a plant. So there's
8 actually two times, at the beginning and end. And
9 then the third time is actually if you use a coal
10 plant for peaking rather than base load, that's a
11 poor use of a coal plant, so it would be very
12 expensive in all three of those cases -- not very
13 expensive. The last instance would be very
14 expensive, but the first two could be more
15 expensive than other times.

16 Q. Now, so at the beginning or at the end --
17 so I better understand, why are you saying it's
18 more expensive at the end?

19 A. If you take a look at the King plant, the
20 High Bridge plant, the Riverside plant, the King
21 plant had a lot of failures over the last few
22 years. It didn't have the ability to ramp up and
23 down, the boiler was in poor shape. And so if you
24 actually have the plant off line, you have to look
25 at replacement power for that. If the plant is off

1 line at peak times, you don't have a reliable
2 plant, it gets to be very expensive to replace that
3 energy.

4 Q. Based upon the company's response to
5 request 3-21, it's my understanding your test year
6 jurisdictional cost-of-service study allocates cost
7 to North Dakota for the Excelsior Mesaba project
8 where the so-called clean energy technology
9 Minnesota legislation requires Xcel to purchase 450
10 megawatts of base load capacity in energy under a
11 long-term contract. Is my understanding correct,
12 first of all, that that is --

13 A. Is it that there's dollars in the rate
14 case for that?

15 Q. In this rate case for that.

16 A. Yes, that's true.

17 Q. And that contract is designated by the
18 Commissioner of the Iron Range Resources and
19 Rehabilitation Board as a project that is located
20 in the taconite tax relief area and provided by the
21 Minnesota PUC; correct?

22 A. I don't have that response right in front
23 of me, but -- so I can't say that's exactly
24 correct, but I believe it's true.

25 Q. This rate case also includes allocations

1 to North Dakota for Minnesota's wind power mandate
2 legislation of 425 megawatts of wind conservation
3 system -- conversion systems; correct?

4 A. The 425 megawatts is what I talked about
5 earlier, and that was part of -- that was part of
6 the agreement when we ended up relicensing the
7 Prairie Island plant. And as I mentioned earlier,
8 that's some of the lowest-cost energy we have on
9 our system now, so it's -- a lot of that is around
10 3 cents, so it's very economical, so North Dakotans
11 do get the benefit of that energy.

12 Q. So it is included in this rate case;
13 correct?

14 A. Actually, I'd have to clarify that, if
15 it's 425 megawatts. Anne Heuer can answer that,
16 but I'm thinking that it would probably go through
17 the fuel clause, so it probably wasn't part of the
18 other rate case.

19 Q. In '94, the Minnesota legislature required
20 NSP to construct and operate, purchase or contract
21 to construct and operate 125 megawatts of biomass
22 generation as part of the overall bill to allow
23 additional dry cast storage at the Prairie Island
24 nuclear plant; is that correct?

25 A. That was part of the Prairie Island

1 legislation when we were trying to extend the life
2 of the Prairie Island plant overall, and with that
3 there was some major battles at the legislature
4 trying to keep that plant open, and there's
5 requirements for wind and there's requirements for
6 biomass, and we made the decision -- and the
7 customers -- from a customer perspective, it was
8 substantially less expensive to keep that plant
9 open and do a few other things than it was to shut
10 it down. If you look at the relicensing of PI and
11 Monticello, what we're doing right now, that's
12 going to save our customers more than a billion
13 dollars, and so history has shown it was the right
14 decision, also.

15 Q. So the answer is yes; correct?

16 A. Yes.

17 Q. And that was built?

18 A. Say that again.

19 Q. Where was that built?

20 A. The biomass?

21 Q. Yes.

22 A. There's -- Betsy would be able to answer
23 that better. I think it was actually refined to
24 110 megawatts because that's what we could do cost
25 effectively. There's one St. Paul cogen project,

1 and I can't remember the locations of the others.

2 Q. Was that the least-cost option for the new
3 base load energy?

4 A. Given that -- if you take a look at the
5 package as a whole, when you think about keeping
6 Prairie Island open and the mandates it required to
7 keep the plant open between wind, biomass, there's
8 no question it was the least-cost option. If you
9 combine all of those, it was the least possible
10 cost option to keep the plant open given all the
11 requirements that were put on it.

12 Q. Does your jurisdictional cost-of-service
13 study include any allocations of these costs to
14 North Dakota?

15 MS. HERTZLER: Objection, Your Honor. I
16 think this is maybe beyond the scope of Mr.
17 Larson's testimony.

18 MR. BAHR: And I just want him to tell me
19 who to ask if he's uncomfortable answering.

20 THE WITNESS: I believe it's Anne Heuer.

21 Q. (MR. BAHR CONTINUING) Under Minnesota's
22 wind power mandate, the legislation required that
23 the Minnesota PUC implement a preference for wind
24 conversion systems located in state and the State
25 of Minnesota? That is correct?

1 A. Yes.

2 Q. And of all of the mandated wind systems,
3 how many were located outside of Minnesota?

4 A. We actually have some wind near Velva,
5 North Dakota, and we also have some wind near
6 Brookings, South Dakota.

7 Q. Those are in place now?

8 A. Yes.

9 Q. How much in Velva?

10 A. I think it's 12 megawatts.

11 Q. How much in Brookings?

12 A. I think it's about 50 megawatts. We're
13 also looking at other opportunities to increase
14 capacity in North Dakota. I mentioned the
15 transmission line that we're building right now and
16 also the second line we're supporting for this
17 area, so we think there will be substantial
18 investment in the future.

19 COMMISSIONER WEFALD: Was that 50 or 15
20 megawatts?

21 THE WITNESS: 50 in Brookings.

22 COMMISSIONER WEFALD: 5-0?

23 THE WITNESS: 5-0, yes.

24 Q. (MR. BAHR CONTINUING) How about of the
25 wind power purchased by NSP? I believe one of your

1 responses to staff indicates that 98.3 percent of
2 it is purchased from Minnesota. Does that sound
3 accurate?

4 A. What response is that?

5 Q. That would be 3-8.

6 A. I haven't done the math on it, but if --
7 so for the NSP system. I would say that the
8 numbers on 3-8 are accurate. So if you've actually
9 multiplied the math on it, I'd say that's accurate.

10 Q. Assuming it's 98.3 percent, what
11 percentage of your Minnesota company's business is
12 in Minnesota?

13 A. 75 percent of the business is in
14 Minnesota, but basically what we've done on our
15 wind is we actually put our RFPs and asked people
16 to come back with the least-cost options. The
17 options that have come back, initially there was
18 substantial transmission capacity on the Buffalo
19 Ridge in southwest Minnesota, so it made logical
20 sense if you've got additional -- if you've got
21 capacity on the system, that's where the developers
22 actually went. We didn't choose the sites. The
23 developers did. I think that as we add more
24 transmission capacity in North Dakota, that's going
25 to change, but there was capacity there and it was

1 an easy place. If you look at cost of wind,
2 there's a few factors, land rights, wind speed and
3 turbine costs and then also transmission. If
4 you've got available transmission, that gives
5 certain areas a bias, and the Buffalo Ridge had a
6 major bias because there's additional capacity
7 available at that location.

8 Q. And with regard to wind speeds, you would
9 agree that North Dakota is superior in that area?

10 A. I would say there's -- I'd say that you
11 would have to take a look at the individual
12 locations. There's places in each state that has
13 good locations. If you took a look at the state as
14 a whole, it maybe has more locations, but there's
15 still a lot of very good locations within
16 Minnesota, Iowa, South Dakota, not as many
17 Wisconsin, but there's good wind resources in North
18 Dakota.

19 Q. If you know, on average what does it cost
20 for new wind generation installed in Minnesota
21 compared to North Dakota?

22 A. Betsy would answer that question better
23 than I will, but you need to take into account both
24 transmission costs, wind speeds and other factors,
25 so it's just not the construction of the turbines.

1 Q. Now, according to Minnesota's Wind
2 Integration Study, WindLogics projected mean annual
3 capacity factors for the Fargo, Grand Forks and
4 Minot areas of about 38 to 50 percent. Are you
5 aware of that?

6 A. I'm not familiar with that study.

7 Q. Who would be? Would that be Betsy?

8 A. Betsy might be.

9 Q. Are you aware of how that compares to the
10 actual factor achieved in Minnesota?

11 MS. HERTZLER: Your Honor, I think he just
12 said he's not aware of the study.

13 MR. BAHR: I'm just asking him if he's
14 aware of what was actually achieved in Minnesota.

15 THE WITNESS: Betsy would be able to
16 answer that better.

17 Q. (MR. BAHR CONTINUING) Are you aware of
18 the U.S. Department of Energy's National Renewable
19 Energy Laboratory, NREL? Are you familiar with
20 that?

21 A. I've heard of it. I'm not familiar with
22 their studies, though.

23 Q. So statements they've made or studies
24 they've issued you're not familiar with?

25 A. Not in detail, no.

1 Q. Is there someone who will be testifying
2 that is more familiar with that?

3 A. Betsy would have more knowledge on that
4 than I would.

5 Q. With regard to the cost of leasing land,
6 would you say that it's generally cheaper in North
7 Dakota than Minnesota generally?

8 A. I couldn't answer that question. Betsy
9 might be able to.

10 Q. Would you say that it is easier and
11 cheaper to site transmission facilities in North
12 Dakota than in Minnesota, or is Betsy the best one
13 to answer that?

14 A. I'd say transmission siting can be
15 difficult or easy depending on who lives close to
16 it, and so you can get somebody difficult in either
17 location that make it difficult, but Betsy might
18 have comments on that. It all depends on who lives
19 closest. I don't think it's necessarily
20 appropriate -- or consistent on a state-by-state
21 basis.

22 Q. Do you have experience with doing so in
23 both states?

24 A. Somewhat experienced, yes. We actually
25 built a line in North Dakota a few years ago and

1 we're building lines right now.

2 Q. And based upon that experience, do you
3 know if it's been easier to do it in North Dakota?

4 A. I don't know that it is, no. Betsy might
5 have another opinion on that, but I can't tell you
6 one is easier or harder than others.

7 Q. Now, NSP recently had an electric rate
8 increase hearing before the Minnesota PUC; correct?

9 A. Yes.

10 Q. Are you aware of the Minnesota Climate
11 Change Agency Group that issued its final report to
12 the Minnesota governor and legislature?

13 A. Minimally. Actually, Rick Rosvold will
14 have more details on that than I will.

15 Q. So he would be the one to follow up with
16 questions about that?

17 A. Yes.

18 Q. Why don't you tell me what community-based
19 energy development is.

20 A. Community-based energy development is
21 actually a partnership with communities to try and
22 get local ownership of projects within the state so
23 you don't have other people owning those. We've
24 actually proposed that in Minnesota, and we've
25 actually had some informal discussions in North

1 Dakota, too, of having a similar proportion in
2 North Dakota. So it is one that we have been
3 working on the implementation of. It's been more
4 difficult than what we thought for a number of
5 factors -- for a number of reasons.

6 Q. You mentioned you've had discussions, so
7 does that mean there is no community-based energy
8 development currently in North Dakota?

9 A. No, there isn't, but we would be open --
10 if the Commission decided that was the right thing
11 to do in North Dakota, we would be open to
12 discussions around that on a proportional basis or
13 we would be open to discussions overall.

14 Q. In November -- on November 28th of 2007,
15 Chuck McFarland addressed the Energy Supply GHG
16 Forecasting, indicated that all the wind generation
17 facilities needed to achieve the Minnesota
18 renewable portfolio standard, that all of them that
19 are needed to do that can't be accomplished in
20 Minnesota alone and that the capacity factors for
21 wind in North Dakota are higher than Minnesota's.
22 I don't know if you're familiar with that
23 statement. Do you agree with it?

24 A. I'm not familiar with that statement.

25 Q. So do you have an opinion on whether it's

1 accurate or not?

2 A. I think you still have to take a look at
3 each particular location and say there's places in
4 Minnesota that are better than North Dakota and
5 there are places in North Dakota that are better.
6 I think if you take a look at overall capacity in
7 North Dakota, there is substantial wind capacity in
8 North Dakota, I wouldn't debate that at all, but
9 there are also good locations in Minnesota.

10 Q. But the first half of his statement was
11 that there's not adequate in Minnesota to meet
12 their own requirements. Do you agree or not have
13 an opinion on that?

14 A. I would say that if you take a look at our
15 4,000 megawatts, it's likely that we'll need to go
16 to the regional area to supply that. We'll need
17 wind from Minnesota, we'll need wind from North
18 Dakota, we'll need wind from South Dakota to supply
19 that in an economical way. So I can talk about
20 what our needs are and how we think we'll approach
21 it, but we definitely feel that we need to spread
22 it out overall. I might add that that's one of the
23 benefits of the CapX program, that it will allow
24 more development of wind in North Dakota than
25 what's currently available.

1 Q. Now, did your company lobby the North
2 Dakota legislature to pass the bill permitting the
3 PSC to grant advance prudence for planned
4 generation and transmission investment?

5 A. State that again.

6 Q. A bill that would permit the PSC to grant
7 advance prudence for planned generation and
8 transmission investment. Do you recall that?

9 A. I can't remember the details of that bill.

10 Q. Is there someone who will be testifying
11 who would be more familiar with that?

12 A. We might have to get back to you on that.
13 We can get back one way or another.

14 Q. Well, are you then familiar with Otter
15 Tail Power Company and MDU filing a determination
16 for advance prudence for their share of the
17 proposed Big Stone II coal plant? Do you have any
18 information about that?

19 A. I'm aware that they're in the process of
20 doing that. I'm aware that it's going on. I don't
21 know the details of it.

22 Q. Is there someone else who will be
23 testifying more familiar with that process?

24 A. You could ask me the questions that are
25 available, but I'm not sure that I would have the

1 answer and I'm not sure anybody else would, either.

2 MS. HERTZLER: Your Honor, it's somewhat
3 outside the scope of what Mr. Larson has testified
4 to or, frankly, any witness in this proceeding with
5 regard to the Otter Tail and MDU proceeding. It's
6 not within the scope.

7 JUDGE WAHL: Are you objecting that it's
8 irrelevant?

9 MS. HERTZLER: I am objecting that it's
10 irrelevant unless counsel can explain to us why it
11 would be important that we find a witness that
12 could provide that information.

13 JUDGE WAHL: Mr. Bahr.

14 MR. BAHR: I guess the primary question --

15 JUDGE WAHL: Just a moment. I'm sorry.
16 Go ahead, Mr. Bahr.

17 MR. BAHR: I just wanted to, first of all,
18 confirm that they helped get this law passed and
19 whether they've ever even utilized it, because
20 that's significant in this whole process. And so
21 Mr. Larson said he does not recall much about the
22 legislation, and so I'm trying to find out who can
23 give me some answers or if counsel can stipulate
24 that they were behind the passage of this law and
25 then have never utilized it, that would be

1 adequate.

2 MS. HERTZLER: I can verify on a break,
3 Your Honor, with perhaps someone who is here who
4 might be able to give me that information, but I
5 was not prepared to speak on that subject hereto
6 and cannot stipulate at this point.

7 MR. BAHR: And I'm fine with that if we
8 can have that confirmed over a break.

9 JUDGE WAHL: I think, Mr. Bahr, you should
10 pursue this with Ms. Hertzler. The objection is
11 sustained. Maybe I should rephrase that, qualify
12 that. The objection is sustained with reference to
13 Mr. Larson's further testimony.

14 MR. BAHR: I think we can discuss and try
15 to get a stipulation for the record on that.

16 JUDGE WAHL: That's what you should do.

17 Q. (MR. BAHR CONTINUING) Based upon your
18 experience, Mr. Larson, do you have an opinion
19 regarding whether it's easier to sign contracts for
20 wind or to build new generation facilities?

21 A. I'm not sure I understand the question.

22 Q. Well, have you done both processes?

23 A. Personally?

24 Q. Your company.

25 A. As a company, we have.

1 Q. And is there advantages to one over the
2 other, obviously?

3 A. There's advantages to either one, yes.

4 Q. And with regard to contracting, does that
5 reduce your risk, for example, future changes?

6 A. There's benefits to each one of them. If
7 you take a look at a purchase agreement, one of the
8 advantages to that is you don't have to put out the
9 investment initially, but the disadvantage is once
10 the contract runs out after 20 years, that the
11 likelihood of that price going back to market is
12 very good, so you've paid for the asset over those
13 20 years, but it's probably going to go back to
14 market. When we initially got into the purchase
15 part of the business, it was new to us and we
16 weren't familiar with it, so you've got to take a
17 look at your own capabilities. In the long run we
18 think that ownership of windmills is better for the
19 customer. It may be a little bit higher initially,
20 but in the long run, when you pay for it over 20
21 years or whatever, you end up with an asset in the
22 end. So you've got to take a look, there's a lot
23 of factors to go into that, whether it makes sense
24 to own or purchase. In reality, a mixture of both
25 is probably good.

1 Q. And based upon your holding, so to speak,
2 what is your breakdown of owning and purchasing
3 right now?

4 A. Of all generation?

5 Q. Wind.

6 A. Wind. Right now I believe all of it's
7 purchased. We're in the process of building a new
8 project in Grand Meadows. It's about a hundred
9 megawatts, I believe, that we will own. We've got
10 a 500-megawatt RFP that's out right now looking for
11 ownership. Our hope is that part of that -- part
12 of those resources will come from North Dakota. So
13 we are moving more towards ownership and we're
14 hoping the responses to that RFP will be positive
15 for North Dakota ownership, too.

16 Q. Do you know when Grand Meadows will be
17 coming on line?

18 A. I don't know the exact date of that.
19 Betsy will have a better idea than I do.

20 Q. As a policy matter, do you agree that
21 electric companies should be rewarded when they
22 save customers money?

23 A. I believe that if -- the primary goal of
24 regulation is actually provide adequate returns for
25 prudent costs. And when we did have the PBR plan

1 up here, that was actually a plan that took a look
2 at customer satisfaction, reliability, safety and
3 cost, and there was a mechanism built in there that
4 if we did a better job on that, you could earn a
5 little more. If we did a worse job on that, you'd
6 earn less. It was a positive plan for us overall.

7 In this case I still believe from a
8 customer point of view our service levels are
9 extremely high, our rates are reasonable, and I
10 feel that our investors deserve an adequate return
11 in exchange for that.

12 Q. This is kind of a long question, so bear
13 with me here. This is regarding data request 3-24.
14 Staff asked for transmission investment and
15 associated revenue requirements located in each
16 state, because it was concerned that NSP does not
17 have the transmission infrastructure in North
18 Dakota to generate electricity in North Dakota
19 because its service territory somewhat resembles
20 those little islands, those three cities, Minot,
21 Grand Forks and Fargo. The response stated that
22 all transmission assets are considered a system
23 cost and it is allocated to a particular
24 jurisdiction using a demand allocator. Can you
25 file an exhibit, can you create an exhibit that

1 would show transmission investments by state by the
2 Minnesota company?

3 A. Could I see that? I don't have a copy of
4 that. I didn't reply to that, I don't think,
5 myself, so --

6 MS. HERTZLER: I don't have a copy here.

7 THE WITNESS: It's 3-24; right? I don't
8 think that was a response to me.

9 MS. HERTZLER: Just a point of
10 clarification, counselor. Are you requesting
11 discovery?

12 MR. BAHR: Well, I'm asking -- excuse me.
13 It was previously requested and it hasn't been
14 provided and we're asking whether there's any way
15 to get answers to the request.

16 MS. HERTZLER: You know, I will let Mr.
17 Larson take a look at the response, but my guess is
18 that's a question probably best put to Ms. Heuer.

19 THE WITNESS: I'll let Anne Heuer respond
20 to that question.

21 Q. (MR. BAHR CONTINUING) Now, there's a news
22 release from your company that indicates you plan
23 to build 200 megawatts of wind generation in North
24 Dakota by 2011; is that correct?

25 A. Yes, I believe it is.

1 Q. Is that your plan irrespective of whether
2 the federal wind production tax credit remains in
3 effect?

4 A. That's our plan. We need to take a look
5 at how cost-effective we can do it, but that's our
6 plan. We need to consider all costs associated
7 with it, but we're actively pursuing it right now
8 as we speak.

9 Q. What if it's determined that the wind
10 facilities are not the least-cost option, will it
11 still be built?

12 A. We'll have to get into the details of
13 that, but we're committed to -- we're committed to
14 the 200 megawatts and trying to make that
15 successful by 2011. We're evaluating all
16 alternatives right now to do it.

17 Q. Well, have you begun acquiring land
18 easements for the construction?

19 A. One of the things is if you take a look at
20 that wind development, there's a lot of developers
21 that have gone out there and established rights on
22 the transmission system and then also land rights,
23 and so if we want to actually own that wind, what
24 we're actually looking at is actually purchasing
25 the land rights and the wind -- and the

1 transmission rights from other people so we can
2 actually develop those projects. That's what we're
3 pursuing right now. If you went out to just get
4 the land right now and signed up for MISO by
5 yourself, it would be -- I think MISO has a
6 600-year wait. So the best way to get to that
7 is -- hopefully that will be changed here and fixed
8 pretty soon, but the best way to do it is actually
9 look at a turnkey project where we could purchase
10 it from someone else. We're looking at those
11 options.

12 Q. So it's still in the planning stage; would
13 that be accurate?

14 A. Yes.

15 Q. Now, your primary load center is
16 Minneapolis-St. Paul area?

17 A. For the NSP system, yes.

18 Q. Is it true that in general energy flows
19 from the west to the east?

20 A. In general. In the states we work in, in
21 general, that's true.

22 Q. Is it more efficient or less efficient to
23 have energy dispersed in the middle of a
24 transmission line compared to distributing it at
25 the end of the line?

1 A. The most effective way to put your
2 generation is closest to the load. You end up
3 with -- in general, if you have generation closer
4 to the load, it's a better way to go about it. You
5 also have to take into account the size of your
6 generation. If you've got a 50-megawatt load out
7 there or a hundred-megawatt load and it's more
8 cost-effective to build a thousand-megawatt plant,
9 you don't put a hundred megawatts all across the
10 system. In general, you have to balance the size
11 of the plants and where the load locations are, but
12 generally it's better to have it close to your
13 major load areas.

14 Q. Do the cities of Fargo and Grand Forks
15 provide stability to the transmission lines as
16 power runs from west to the east into the Twin
17 Cities?

18 A. If you take a look at the North Dakota
19 system, North Dakota exports more energy than it
20 produces, so any energy that's consumed in here is
21 good for the region. So the shorter distance you
22 have to send it, the better off you are from a
23 stability point of view.

24 Q. Grand Forks and Fargo are kind of on the
25 outer limits of NSP's service territory; correct?

1 A. They're probably -- that would be correct,
2 yes.

3 Q. And are there any plans to investigate in
4 transmission infrastructure there?

5 A. Right now we're doing studies. I
6 mentioned earlier we've got the CapX study that's
7 going on, we've got planned transmission into the
8 Fargo area. We've got another study going on to
9 take a look at how to meet the future mandates.
10 We're looking at all options that would increase
11 transmission capacity into North Dakota
12 substantially. There is also that study -- or not
13 done yet that could include -- that could include
14 lines to Minot, Grand Forks. The need is more on
15 the energy production side, though, than it is on
16 the customer serving side. I think the lines are
17 probably adequate to serve the load. There it's
18 really generation support that's needed.

19 Q. Do you own any generation assets in North
20 Dakota?

21 A. No.

22 Q. Are you familiar with activities of other
23 companies, such as MDU and Otter Tail, with regard
24 to the Minnesota PUC? Do you follow that?

25 A. Somewhat. Not on a daily basis, but

1 somewhat.

2 Q. I'm going to ask you the question and then
3 either you're not the one to answer or you can let
4 me know.

5 On August 31st of 2007, MDU and Otter Tail
6 filed a letter with the Commission to update it on
7 developments of its transmission certification and
8 route permit pending before the Minnesota PUC which
9 related to their proposed Big Stone II coal plant.
10 In that -- I want to see if you are aware that they
11 reached an agreement with the Minnesota Department
12 of Commerce to offset a hundred percent of the
13 carbon dioxide emissions attributable to the
14 proposed Big Stone II coal plant for the
15 electricity used by the customers in Minnesota.
16 Are you familiar with that at all?

17 A. Vaguely familiar.

18 Q. Are you aware that the agreement with the
19 Department of Commerce will support Otter Tail's
20 recovery from Minnesota customers of the costs
21 associated with offsetting the carbon dioxide
22 emissions attributable to the generation of
23 electricity at Big Stone II for customers in
24 Minnesota? Is that your understanding?

25 A. Repeat that question again.

1 Q. It's a tough one to follow.

2 MS. HERTZLER: Your Honor, Mr. Larson has
3 already indicated that he's only vaguely familiar
4 with this proceeding. If counsel wants to rely
5 upon publicly filed documents related to this
6 proceeding, we have no objection, but I'm afraid
7 Mr. Larson is not an expert in this area and I
8 would object to the line of questioning.

9 MR. BAHR: And we will submit those
10 documents, and I understand you won't oppose it?

11 MS. HERTZLER: We will not oppose your
12 reliance on publicly filed documents.

13 JUDGE WAHL: The objection is sustained.

14 Q. (MR. BAHR CONTINUING) You said you're
15 generally familiar with that agreement which
16 basically says Minnesota pays its cost for that.
17 Has your company made any efforts to reach similar
18 agreements?

19 A. I don't know enough about that. I don't
20 know enough about their agreement to really comment
21 one way or another, so I can't really comment if
22 we're working on something similar.

23 Q. That's fine. We will submit it and can
24 address it from that point.

25 A lot of the response of your testimony

1 and others talks about the benefits of an
2 integrated system. Is it your understanding that
3 staff is opposed to an integrated system?

4 A. What I would say is, I think staff
5 probably realizes the benefits of an integrated
6 system. I'm not sure that they fully appreciate
7 what it takes to keep an integrated system together
8 and that it's -- if you take a look at an
9 integrated system, it's not an a la carte system
10 where you can pick and choose what you want in and
11 out. It's more like when you reach an agreement
12 with some people, that in general when you have
13 partners, not everybody gets exactly what they
14 want, but you need to take the package as a whole
15 and say, is it good for us or not, and then you
16 need to say, if it's not good, how can we work with
17 it to make it improve -- make improvements in it.
18 That's where we suggested sitting down with the
19 staff and getting more involvement in the resource
20 planning process, the three months prior to its
21 filing. I think that would be helpful. I think it
22 is something that's missing. I think if you take a
23 look -- if you take a look around the country, this
24 is a challenge not just for North Dakota,
25 Minnesota, South Dakota, I mean, it's a challenge

1 around the country. And I guess what we're open to
2 is sitting down with the Commission and saying what
3 ideas do you have that keeps the system intact,
4 because I think there's huge benefits for North
5 Dakota customers. If you look at the -- North
6 Dakota customers are treated well right now. I
7 guess we're open to ideas on how we can keep the
8 system intact and move forward with this.

9 Q. Would you agree that you can have an
10 integrated system and then have customers' costs
11 allocated differently based upon their use or their
12 contributions? My point is, one isn't exclusive of
13 the other?

14 A. I guess we have a real concern with kind
15 of picking the integrated system apart. Like an
16 example might be if one state requires one thing
17 and then you go ahead and make the improvements in
18 the plant and later -- let's say three years later
19 the federal government increases the standard, and
20 so now you actually are mandated on a federal basis
21 you have to do that. You did it for the first
22 state and the cost of that was, say, a million
23 dollars, you wait until the federal mandate and
24 it's \$3 million, so how do you allocate those
25 costs, and you get into some very, very difficult

1 allocation processes, and we have some huge
2 concerns with pulling the system apart that way.
3 That's why we proposed trying to work with the
4 planning process, because the first state that
5 forced the \$1 million investment said, Well, I
6 should get even more back than what I paid
7 initially because we did it at a cheaper time. So
8 I think it leads you to a process that's very, very
9 difficult on cost allocation and it's not going to
10 be good for North Dakota customers in the long run,
11 and so I guess we're open to ways to help improve
12 that overall.

13 Q. Now, would you agree or feel that that
14 applies to things such as Minnesota's super tax for
15 the dry-cast nuclear waste storage which only
16 benefits them, the money goes directly to them?

17 A. I would disagree on the settlement of the
18 dry-cast storage. In 1994 I was at the legislature
19 the day of the vote when the legislature voted on
20 the Prairie Island, and the place had thousands of
21 people in it. People were -- protesters were there
22 from around the country. There was also people
23 there from our power plant saying -- from our
24 nuclear Prairie Island plant saying save our jobs.
25 And as a total package, it was a good deal for the

1 customers. You can pick off any particular thing
2 and say, well, we wish we didn't do that, but we
3 had the option of either keeping the plant open or
4 not, and had we not agreed to things, I believe the
5 plant would have been closed down and the costs for
6 North Dakota customers would have been
7 substantially higher. So I think as a package
8 there's no question it was a good deal. If you
9 look at relicensing the two nuclear power plants,
10 it's going to save our customers more than a
11 billion dollars, maybe getting closer to 2 billion,
12 if that plant would have shut down. Probably the
13 second it would have shut down, the costs would
14 have been substantially higher. Would we like
15 those extra things in there? No, but you have to
16 take a look at what the alternative is. If the
17 alternative was shutting the plant down, it was a
18 good decision.

19 Q. So if North Dakota passed something on
20 transmission lines or something within North Dakota
21 that increased the cost by 16 million, Minnesota
22 would be asked to pay 70 percent of it?

23 A. If something was passed in North Dakota,
24 we'd take a look at it, first, is it reasonable for
25 the customer, overall is it reasonable for the

1 integrated system.

2 I'll go back to the Excelsior project on
3 that. We've done a lot of work to point out the
4 pros and more cons with Excelsior. There's some
5 challenges with Excelsior from a cost point of
6 view, from an implementation point of view, a lot
7 of different things. So we want full debate on
8 that. If there's something in North Dakota that
9 was passed, we would want to fully debate that out
10 and say, Is it good or bad for the system? If in
11 the end the law was passed, we'd have to figure out
12 a way to work with it just like we would any other
13 law. We would also say if it's bad for the
14 customers, we would try and work with it to fix it
15 first. So each state has their opportunity to --

16 Q. Are you saying if it was passed and you
17 determined it wasn't good for the customers, would
18 it all still be passed on to all the customers?

19 A. If it's law and it's required, that's what
20 we're required to do. Just like if a plant
21 increases property tax -- we don't ever go in and
22 ask for a property tax increase. If they increase
23 it, you have the choice, do you shut the plant down
24 so you do away with that tax or do you pay it? So
25 you would have to look at other alternatives. But

1 in the end you've got to comply with the law.

2 Q. Of your entire generation fleet, how many
3 of them are not owned a hundred percent by NSP?

4 A. I'd say Betsy would be able to better
5 answer that question than I could.

6 Q. NSP is a member of MISO, Midwest
7 Independent Transmission System Operator; correct?

8 A. Yes.

9 Q. Is it your understanding that MISO manages
10 the deployment of transmission and generation
11 assets across many states and that it functions to
12 make better use of generation and transmission
13 assets on a much larger scale than NSP or any
14 single utility company? That's the goal?

15 A. Yes, that's correct.

16 Q. With MISO managing the region's assets,
17 doesn't it bring about a regional diversity of
18 generation resources for the entire region?

19 A. The question is, can you get the same
20 diversity out of MISO that you get individually?

21 Q. Does it bring a diversity for the entire
22 region because it's managing the assets?

23 A. There's benefits to MISO. In particular
24 if you take a look at the wind we're bringing on
25 line, the rest of the MISO system helps with the

1 wind variability in there, so that's helpful and
2 beneficial. There's diversity on our system and
3 there's diversity on theirs and they're both
4 positive.

5 Q. In smaller states and smaller service
6 territories like North Dakota and South Dakota, is
7 it quite common for cooperatives, municipalities
8 and investor-owned utilities to cooperate with one
9 another and build one power plant together?

10 A. There are partnerships that allow common
11 ownership of plants, yes.

12 Q. Now, would something like this help
13 address some of NSP's concerns regarding requiring
14 greater number of generating resources to get to
15 smaller areas?

16 A. If I took a look at North and South
17 Dakota, I don't think there's any other
18 partnerships there that have the diversity that we
19 have on our system, so I do think it's probably
20 helpful and beneficial to them. But could they
21 reach the diversity we have on our system, to my
22 knowledge, there isn't any nuclear plant in North
23 Dakota and there isn't any in South Dakota, and if
24 you take a look at our costs, that's extremely
25 beneficial to our customers overall. So I think

1 the bigger in size you get, the better off you are
2 and the more partnerships you have, but it wouldn't
3 reach the level that we're at today on our system.

4 MR. BAHR: Would it be appropriate to take
5 a five-minute recess at this time? I'll have just
6 a few follow-up questions.

7 JUDGE WAHL: Five minutes, Mr. Bahr.
8 We'll be in recess until 10:10.

9 (Recess taken.)

10 JUDGE WAHL: All right. Let's be in
11 order. Mr. Bahr, when you're ready.

12 MR. BAHR: Your Honor, I don't think we
13 have any further questions at this time.

14 JUDGE WAHL: All right. Questions from
15 the Commissioners?

16 COMMISSIONER WEFALD: Yes.

17 JUDGE WAHL: Commissioner Wefald.

18 COMMISSIONER WEFALD: First, I would like
19 to state for the record that I did not take tours
20 with NSP of any of the plants that are part of this
21 case, King plant, High Bridge plant, the mercury
22 control project at King and Sherco, the Grand
23 Meadows wind project or the Red Wing and Wilmarth
24 dry fuel plant. I did go on a nuclear tour with
25 NSP several years ago with the Commission and

1 Commission staff, and I did go to view the
2 Riverside plant as part of a MARC tour last year,
3 but that was a MARC-sponsored tour.

4 **EXAMINATION**

5 **BY COMMISSIONER WEFALD:**

6 Q. Next, I would like to -- are you
7 requesting recovery of donations and economic
8 development funds in this rate case?

9 A. Yes, we're requesting 50 percent recovery
10 of those.

11 Q. And that would amount to how much?

12 A. Anne Heuer can answer the exact amount on
13 that. I don't have it right in front of me.

14 Q. In your testimony this morning you
15 mentioned that transmission is needed in North
16 Dakota in order for you to be able to consider
17 purchasing additional wind in North Dakota. I
18 remember a transmission case just a few years ago
19 that involved NSP with wind that connected with
20 wind in Buffalo Ridge. Are you familiar with that
21 case?

22 A. Somewhat, yes.

23 Q. Yes. Was there -- I remember like a
24 two-week certificate of need hearing that NSP was
25 involved with.

1 A. In Minnesota?

2 Q. Yes.

3 A. I'm fairly familiar with it, yes.

4 Q. Yes. And so you had said that there was
5 adequate transmission already in Minnesota for the
6 wind development that took place there. Then why
7 did you need to go and ask for a certificate of
8 need for a new transmission project in Minnesota in
9 connection with those wind projects?

10 A. I'll answer a couple questions -- or a
11 couple comments that you asked there first, if you
12 would. I did say that for North Dakota wind
13 development we need additional capacity here for
14 the long run to expand it to the degree that we
15 wanted. We also have an RFP out right now to look
16 to actually purchase some energy --

17 Q. But I'm not asking about that RFP. I'm
18 asking about, did you need to have additional wind
19 -- did you need to have additional transmission and
20 go to seek building additional transmission in the
21 last few years in Minnesota?

22 A. Excuse me. I was going to answer both,
23 but I'll answer the other one first and then if you
24 let me answer the other one, I'd appreciate that.

25 Q. Okay.

1 A. As far as the wind development in
2 southwest Minnesota, there were -- there was wind
3 that was brought on line at the very beginning that
4 there was capacity for, and so that was brought on
5 line. Since then more wind has been brought on
6 line and actually outgrown the capacity in that
7 area, so we've added additional capacity to the
8 line, but there was some initial capacity there to
9 add wind without much development cost at all. So
10 we added wind, we added so much that we needed more
11 transmission, we added transmission and then
12 there's more wind being added now, too.

13 Q. So you did need to add additional
14 transmission capacity in order to be able to do the
15 wind development that you have -- purchase the wind
16 that you did in Minnesota?

17 A. Not the first turbines, but after it
18 continued to grow, we needed to add more wind
19 there.

20 Q. Okay. All right. Thank you. And then --

21 A. If I could -- excuse me, Commissioner. If
22 I could clarify the other piece just so that we
23 have a common understanding. In North Dakota we
24 are out for the RFP. We do hope we could get some
25 wind development through that right now with the

1 existing --

2 Q. But that's in the future.

3 A. You mean -- well, it could be sooner than
4 later.

5 Q. That isn't what we're talking about in
6 this case. That's plans.

7 A. Okay.

8 Q. And you've said they can change, so -- I
9 know they can change. I've heard this from NSP
10 over the last 15 years. You keep announcing things
11 and they keep changing, so I understand they can
12 constantly change.

13 A. Thank you.

14 Q. All right. The High Bridge plant, on page
15 16 of your rebuttal testimony, that's the plant
16 that now is a natural gas combined-cycle plant.
17 It's stated in your testimony that this is an
18 intermediate load and peak generation plant. As an
19 intermediate load, how much time was this plant in
20 service in 2007? And if you're not the correct
21 person to ask that question of --

22 A. Betsy can answer that. In 2007? In 2007
23 we had just testing on it for the High Bridge
24 plant.

25 Q. All right. And so when did it go into

1 service?

2 A. It's this spring it's going into service,
3 about right now. Betsy can give you the more
4 specific dates, but it's going into service about
5 right now, which is when it was planned to go into
6 service.

7 Q. Okay. So there is no -- there is no
8 history of the use of this plant as an intermediate
9 load facility?

10 A. This will be the first summer that we'll
11 have it fully operational.

12 COMMISSIONER WEFALD: All right. Thank
13 you. All right. I have no further questions right
14 now. Thank you.

15 JUDGE WAHL: Any further -- Commissioner
16 Clark.

17 COMMISSIONER CLARK: Sure. Thanks. And
18 just, I guess, since we're clarifying the record on
19 visits, I have visited over various occasions High
20 Bridge, King and Monticello; however, not Riverside
21 Sherco or any of the wind facilities that have been
22 discussed.

23 **EXAMINATION**

24 **BY COMMISSIONER CLARK:**

25 Q. Would I be correct to say -- I think this

1 is correct -- maybe you can confirm it -- that Xcel
2 is the largest provider of electricity from a load
3 standpoint and probably customers in the State of
4 North Dakota?

5 A. Yes, that's correct.

6 Q. And yet Xcel has almost no generation in
7 North Dakota. Could you -- what has led to this
8 situation, being both the largest utility in North
9 Dakota, but having probably the least investment
10 from a generation standpoint of any utility
11 operating in North Dakota?

12 A. If you take a look at our investment
13 overall, generally we've gone towards -- if you
14 take a look at the plants overall, the Sherco plant
15 and the two nuclear plants by far carry most of the
16 load overall on the system and they are closest to
17 the base load in the Twin Cities and so there tends
18 to be more investment in that. We do -- we do have
19 exchange agreements where proportionally we get
20 about 25 percent of the energy produced in North
21 Dakota, similar to the North Dakota load up here.
22 We would like to expand the load up here, but, as
23 you know, North Dakota exports energy transmission.
24 It concerns an issue that way, too.

25 Q. And yet other utilities that operate in

1 North Dakota have -- as you indicated, they export
2 a large amount of power to Minnesota. Otter Tail,
3 Minnkota, Basin, GRE, Minnesota Power, MDU, all own
4 either significant coal generation, wind
5 generation. Have these other utilities made
6 incorrect investments in North Dakota?

7 A. No. I would guess that all of them made
8 good decisions based on the information at the
9 time.

10 Q. You mentioned the offset purchases that
11 you buy to serve the islands in North Dakota. They
12 are the far western fringe of Xcel's territory.

13 A. I've got a cramp in my leg.

14 COMMISSIONER CRAMER: I get them all the
15 time.

16 Q. (COMMISSIONER CLARK CONTINUING) Is this a
17 purchase power contract?

18 A. We have an interchange agreement.
19 Actually, Betsy can describe that better, but we
20 have an interchange agreement and then also a
21 purchase power. But Betsy can describe those
22 better than I can.

23 Q. Now, with wind you indicated that you
24 thought it was better to actually own the
25 generation, itself, because of a number of reasons

1 that you laid out. Why wouldn't it be the same
2 with your base load needs for power in North
3 Dakota? Why does it make more sense to have
4 purchase power and these interexchange agreements
5 as opposed to simply owning it yourself? Wouldn't
6 the same rationale apply as to your wind?

7 A. I think in reality, we own more generation
8 than we actually purchase, and it's a good thing
9 for our customers to do that, but you also have a
10 balance depending on the needs and that at the
11 time. And I think with the interchange agreement
12 that we have with GRE, it's actually beneficial to
13 both of us. They've got load in the Twin Cities,
14 we've got load up here. They could build -- we
15 could both build plants both ways, but when you
16 operate an integrated system, you're looking for
17 the least-cost option. So we take their generation
18 and supply some of our customers up here. They
19 take part of our generation and supply some of
20 their customers down there rather than duplicate
21 transmission and generation. From a customer
22 perspective, it's lower cost. So that's the reason
23 that we do it overall with that one in particular.

24 Q. With regard to this 25 percent that you've
25 mentioned that serves North Dakota load, how much

1 of that is the interchange and how much is the --
2 is the -- are through purchase power contracts?

3 A. I don't have a breakdown of that right in
4 front of me. I think Anne can answer that
5 question.

6 Q. What should we place a greater value on,
7 the cost to customers or diversity of fuel supply?

8 A. I think what's more important, the cost.
9 I think there's a lot of things that go into
10 diversity of fuel supply. One is the immediate
11 cost. The other is the future cost. And it also
12 depends on where you think fuel prices are going to
13 go. I think in the long run if you have better
14 diversity of good supply, your long-term costs are
15 going to be better. And so in the end from a cost
16 point of view, the diversity over time provides an
17 advantage, just like on your mutual fund. I mean,
18 you could go out and buy one stock, you might be
19 lucky and hit it well, but unless you're willing to
20 put everything in luck, you like to diversify your
21 portfolio and over the long haul you're better off.
22 That's what I do with mine. I know a lot people
23 do. And I think the same thing is consistent with
24 energy, if you have a diverse portfolio of good
25 resources, in the long run you're going to perform

1 better.

2 Q. I guess I would like to explore that a
3 little bit. If you know that your coal plants and
4 your nuclear plants produce power at a certain cost
5 and are going into in the future for some amount of
6 time, why is it better to simply add some natural
7 gas in which raises the cost to consumers simply
8 for the sake of diversity? I guess I'm not
9 following how that's analogous to diversifying a
10 retirement portfolio in an uncertain stock market.

11 A. If you think about an electric system,
12 there's three types of load. One is base load, the
13 other is intermediate load and the other is
14 peaking. On the base load you're willing to spend
15 a lot of money on capital dollars and then you have
16 low operating costs because it's running almost all
17 the time. If you go to a peaking plant, you don't
18 want to spend as much money on capital costs.
19 You're willing to spend it more on fuel, because,
20 you know, on a short-term basis you're not going to
21 run it that much, and so you wouldn't want to have
22 all natural gas across the system, you wouldn't
23 want to have all coal, because if you did that for
24 peaking resources, you would spend a lot of money
25 on capital as compared to a gas plant. So really

1 you need to look at different parts of your system
2 and say what type of resources do you have, and
3 natural gas is less than 10 percent of our system.

4 Q. And yet it appears that you're replacing
5 the base load resource like High Bridge, and at
6 some future point Riverside, with a peaking
7 resource, natural gas. It's not like you're adding
8 new coal to help cover the load growth.

9 A. Neither one of those plants ran to the
10 same capability that Sherco did. Sherco runs --
11 you try and keep that running 24 hours a day, seven
12 days a week. If you look at Riverside and High
13 Bridge, those are old plants and they weren't
14 acting much like a base load. They're acting more
15 as an intermediate. They're not quite a peaking.
16 Because of their capabilities, they weren't
17 functioning as a typical coal plant. And so we're
18 actually ramping Sherco up and down to meet -- to
19 follow our load where you really want to keep that
20 running, so natural gas would keep Sherco running
21 more.

22 Q. Throughout both your testimony and Ms.
23 Engelking's there's -- oftentimes you compare
24 Xcel's cost to the market -- the MISO market
25 cost -- average cost. Is MISO basically a natural

1 gas clearing market?

2 A. Betsy could probably better describe the
3 overall resources in MISO than I can.

4 Q. Okay. To what degree has Xcel looked at
5 building new nuclear to meet its needs as opposed
6 to just relicensing the existing plants and moving
7 more and more of its portfolio towards natural gas?

8 A. There's a couple questions. One is, as
9 far as relicensing the two nuclear plants, I think
10 you're aware that we have made the decision, that's
11 our goal to relicense those. If you take a look
12 out in the future, depending on -- we won't be the
13 first to build any nuclear plant. We may or may
14 not build them, but it is a consideration for the
15 future, more than what it was in the past. Right
16 now we have to see how some of the early plants are
17 going and it is a consideration.

18 Q. Is new nuclear projected to be rather
19 expensive compared to the nuclear plants already in
20 service?

21 A. Any plant that comes on line now compared
22 to plants that are in service are going to be more
23 expensive. Most of the plants that are in place
24 right now are fairly well depreciated, and because
25 of that they're low-cost plants. If you bring new

1 plants on, whether it's nuclear, coal, any type of
2 plant, in general, new plants are going to be
3 higher than the older plants.

4 Q. It's my understanding that across the
5 country certain nuclear plants appear to be cheaper
6 maybe than they really are for customers because
7 some of them were financed quite high and then
8 basically they were bought for pennies on the
9 dollar. Is that the case with -- is that the case
10 with PI and Monticello? Did they ever go through
11 that?

12 A. Actually, we owned Prairie Island and
13 Monticello from the very beginning, so we had the
14 NMC that actually had the operating license for
15 them, but NSP-Minnesota never transferred the
16 ownership of them. We continued to own them from
17 the very beginning.

18 Q. Okay. You had mentioned that as far as
19 environmental mandates, you like to be ahead of the
20 curve. Can ahead of the curve turn into a
21 self-fulfilling prophecy? Do you understand my
22 question? In other words, if you're always
23 projecting out and building for more than what the
24 requirements of federal or state governments are,
25 then in the end it just becomes a self-fulfilling

1 prophecy where, as long as you get rate recovery,
2 the curve is always moving perhaps ahead of where
3 the science should be?

4 A. I could comment on a federal basis. Even
5 though Xcel Energy is a fairly large company, we're
6 not big enough to actually control federal
7 legislation. So, I mean, just similar to our gas
8 purchases for the High Bridge and Riverside plant,
9 even though to us it might seem like a lot, on a
10 federal basis we're just not quite big enough to
11 control that, I don't think. And it would be an
12 estimation of where it's at on a state basis that I
13 could really guess at.

14 Q. Could you talk about load growth in North
15 Dakota compared to Minnesota? How does your load
16 growth look like relative to Minnesota?

17 A. In North Dakota it's a little bit less
18 than what it is in Minnesota. As you know, we've
19 got the territory laws that are a concern and issue
20 up here for us. But there are -- the City of Fargo
21 is actually going through a redevelopment project
22 in the downtown area, which is positive for us.
23 Grand Forks has had some good, positive things over
24 the last several years. Minot has some good
25 growth. But it's not quite to the extent it is.

1 Q. So for fact numbers should I ask another
2 witness as far as --

3 A. Yes.

4 COMMISSIONER WEFALD: Yes.

5 THE WITNESS: Maybe Betsy can answer that,
6 too.

7 Q. (COMMISSIONER CLARK CONTINUING) How much
8 of the decisions regarding the move towards natural
9 gas in Minnesota are related to specific concerns
10 that have been enumerated in public policy in
11 Minnesota regarding global warming?

12 A. I'd say if you take a look at the projects
13 overall, it's a combination of a lot of factors.
14 I'd say, first of all, the age of the plants -- all
15 three plants. We're in a position where we need to
16 do something with them. That was a factor. I'd
17 say that the ability to follow load with natural
18 gas was another factor. And then the third factor
19 is, what kind of costs do we see in the future
20 coming up, you know, from an environmental
21 perspective. Where do we see where things are? So
22 it's a mixture of a lot of different, along with
23 the ability to increase capacity right next to the
24 load, not have transmission there. So there's a
25 lot of different factors in there overall. So that

1 was one, along with a lot of others.

2 Q. Are other utilities treated as Xcel is in
3 the Minnesota legislature, or has it been your
4 experience that Xcel, because it's the largest
5 utility operating and probably most visible one in
6 Minnesota, receive a little extra-special treatment
7 when it comes to how Minnesota laws are written?

8 A. I'd have to understand that question more
9 specifically than what I do.

10 Q. Well, okay, I'll give you a few examples.
11 The PI and Monticello reauthorization legislation
12 where the super tax, as Mr. Bahr described it, was
13 levied; Excelsior, which I understand was very
14 specific to Xcel. It just seems -- community-based
15 energy development project. It just seems that
16 there are a number of instances where Xcel has been
17 targeted by the Minnesota legislature in ways that
18 other utilities are not. Is that accurate, or do
19 these mandates tend to apply to all utility
20 companies operating in Minnesota?

21 A. I would say that we're the largest utility
22 in Minnesota, and because of that we get more
23 attention than others.

24 Q. Does that attention translate into policy
25 differences in how Xcel is treated versus other

1 utilities?

2 A. Well, probably positive and negative. It
3 gives us the ability to influence policy more, and
4 it probably also has an impact on us that people
5 see us more of a target, so it's a mixture of both.

6 Q. In what way has Xcel's size translated
7 into being able to change public policies, as you
8 stated, or lobby for it more effectively in a way
9 that helped North Dakota customers?

10 A. One of the things that we continually work
11 on is property taxes. Property taxes is a huge
12 expense overall. And if you looked at transmission
13 and generation, those are costs that are shared,
14 and we've worked extremely hard on property taxes
15 over the last several years and we have been
16 successful in that overall. Just this last session
17 there was a major effort to increase property taxes
18 on utilities. We worked hard to avoid that. In
19 the end --

20 COMMISSIONER WEFALD: Was that in North
21 Dakota or in Minnesota?

22 THE WITNESS: In Minnesota. Thank you.
23 If I said "North Dakota," I apologize for that.
24 But in Minnesota there was a major effort to
25 increase property taxes, and we worked extremely

1 hard and avoided that, and that would have affected
2 our customers here, too.

3 Q. (COMMISSIONER CLARK CONTINUING) Mr. Bahr
4 asked some questions about the extent to which
5 utilities nationwide have been trending towards gas
6 plants, and I think you said, well, that seems to
7 be the trend, but it's a little bit more than just
8 a mild trend, isn't it? The studies that I've
9 heard -- I think Mr. Bahr talked about 95 percent
10 or something, which is roughly in line with what
11 I've heard about, too, that over the last ten
12 years, something like nine out of every ten
13 generating plants built nationwide have been
14 natural gas-fired units. Is it more than just a
15 trend? Is it a definite rush towards natural gas,
16 in your opinion?

17 A. Depends on what you mean by "rush."
18 There's no question that there's movement towards
19 natural gas.

20 Q. Is there significant movement?

21 A. Significant, yes. So I don't disagree
22 there.

23 Q. To what degree -- I'm going to ask this of
24 Ms. Engelking.

25 When Xcel looked at the Grand Meadows --

1 the Grand Meadows wind generation field, what
2 capacity factors were predicted there? I'm sure
3 you had met towers, anemometers, things like that,
4 measuring what wind speeds are. Do you know what
5 the estimated capacity factors were for that
6 generation site?

7 A. We estimate it to be about 40 percent.

8 Q. What capacity factors are you getting at
9 your existing Minnesota wind farms?

10 A. We have that in testimony actually. Betsy
11 will be able to look it up and answer that
12 question. I think it's not 40 percent right now,
13 though. It continues to improve over time.

14 Q. You stated that you weren't sure if you
15 could tell a difference between the complexity of
16 siting transmission lines in North Dakota versus
17 Minnesota. Is that right?

18 A. I'd say that it depends on who lives next
19 to it. In general, North Dakota is very supportive
20 of energy, and I would agree with you, whether it's
21 power plants, transmission, and I think the general
22 support for energy development in North Dakota is
23 probably higher than Minnesota, so I would agree
24 with you that there's a very good climate up here
25 for development, all the way from the governor down

1 to the residents. I would agree with that.

2 Q. And relative to Minnesota facing existing
3 proposed transmission projects, they like the
4 upgrades necessary for the Big Stone plant. Are
5 you aware of how many years it's taken to analyze
6 and get permission for, say, the Big Stone
7 upgrades?

8 A. Actually, I should clarify. When I'm
9 thinking about getting approval for those projects,
10 I was thinking about the siting portion of it.

11 Q. That's a siting process.

12 A. Yep. And so I would just kind of clarify.
13 I'd say that there's no question that the permit
14 process for Big Stone has been a big challenge for
15 Otter Tail and MDU in Minnesota and -- it's been a
16 big challenge there for sure.

17 Q. And not so much the permit process for Big
18 Stone, itself, but simply the transmission siting.

19 A. That's what I meant to say, transmission
20 to.

21 Q. Are you familiar at all with the St. Croix
22 line between Minnesota and Wisconsin?

23 A. Yes.

24 Q. How many years did that take to --

25 A. Many years. It's more than 10.

1 Q. The direction that Xcel is moving towards
2 wind in North Dakota, you've mentioned you'd really
3 like to get into a turnkey operation. Does Xcel
4 pay a premium for developing power that way as
5 opposed to a purchase power agreement? I have to
6 believe that the developers of those, they would
7 realize some profit over the period of time by
8 developing it themselves. They're not going to
9 turn over a turnkey operation for less than the
10 profit that they would get in just operating it and
11 selling it to you, would they?

12 A. If you take a look at any of the resources
13 we have, we have to take a look at the overall
14 cost-effectiveness to make sure that they're
15 reasonable and fair to the customer, so you both
16 look at the short-term costs as well as the
17 long-term costs. You need to take into account
18 that you'll have an asset after 20 years, too. So
19 there's a lot of modeling that you need to do, but
20 it does have to be cost-effective, I agree with
21 you.

22 Q. Explain for me a little bit why Xcel is
23 opposed to a separate IRP for North Dakota. If
24 running an integrated system is really the cheapest
25 option, then wouldn't a separate IRP for North

1 Dakota simply show that?

2 A. Can you help me understand what you mean
3 by a separate IRP? I'm not sure what you mean.

4 Q. Well, staff has argued -- advocacy staff
5 has argued that Xcel should conduct a study to
6 submit a separate integrated resource plan just for
7 North Dakota, looking at if you were to just serve
8 North Dakota load, here's how you would do it most
9 cheaply. If running an integrated system is the
10 cheapest way of doing that, wouldn't you have more
11 evidence by submitting a separate North Dakota IRP
12 to be able to prove that that is the case as
13 opposed to simply taking -- or simply building your
14 system around Minnesota and then just filing a
15 carbon copy of that with all the other commissions?

16 A. First of all, I agree that Minnesota is
17 three-fourths of the load, but it needs to be a
18 plan that will cover a hundred percent of the load,
19 so on that if you looked at -- if you looked at the
20 separate IRP and actually breaking North Dakota out
21 of the system from the integrated system, if staff
22 wants to have discussions on building a new system
23 up in North Dakota to support the load here, if
24 that's the goal and they want to talk about it,
25 we'll sit down and talk about it. All I have to

1 say from a customer perspective, I think it's going
2 to increase costs substantially. It could increase
3 investment in North Dakota, but the question is how
4 important is the cost of electricity to the
5 customers in North Dakota. If it's not a factor,
6 it could be done.

7 Q. Wouldn't an IRP separately filed prove
8 that, though?

9 A. It's a lot of work to develop an IRP.
10 It's not a two- or three-week study. It's a
11 substantial amount of work.

12 Q. Sure. But in the process of building
13 that, wouldn't you perhaps look at options that
14 Xcel is not looking at today, like partnering with
15 other utilities, which has been the common practice
16 here in North Dakota to have a number of utilities
17 go together and build a power plant?

18 A. That could be an option. If the staff
19 wants to discuss splitting off North Dakota load
20 and developing a separate system to supply that,
21 we're willing to discuss it and talk about it. I
22 think it's going to be substantially more
23 expensive, but we're willing to discuss it.

24 Q. In your experience in dealing with
25 legislatures generally and the Minnesota

1 legislature in particular, is it your opinion that
2 legislatures are usually moved mainly by a
3 dispassionate, objective view of science and
4 economics, or does it tend to be more political
5 expediency and public opinion that moves
6 legislatures?

7 A. You have to give me more information.
8 It's a hard question to answer. With what you gave
9 me, I can't answer that question.

10 COMMISSIONER CLARK: That's all I have.
11 Thank you.

12 JUDGE WAHL: Commissioner Cramer.

13 COMMISSIONER CRAMER: Thank you.

14 **EXAMINATION**

15 **BY COMMISSIONER CRAMER:**

16 Q. One of the disadvantages of going last in
17 this process is that several of my questions have
18 been asked and answered. It's not such a
19 disadvantage. So I may try to put a finer point on
20 some, Kent, and I may put a more blunt point on
21 some. I'm not sure.

22 First of all, I want to, I guess, get to
23 this issue of what I said in the opening and what
24 you're experiencing, that is, that we as North
25 Dakota Commissioners are at a bit of a disadvantage

1 between rate cases with utilities because
2 legislation over the past couple of decades has
3 really taken away a lot of our ability, if not
4 authority, to initiate investigations, you know,
5 rate cases on our own. Those changes were largely
6 supported by -- well, even pushed by the utilities.
7 Is that true? Do you know if that's true?

8 A. I'm not sure exactly which ones you're
9 referring to. I guess I would have to know. But I
10 also would say you may be at a disadvantage that
11 we're not in here filing rate cases, but I also say
12 if we can avoid a rate case for 15 years, from a
13 customer perspective it's a positive thing.

14 Q. Would you say that -- I think you maybe
15 even did say earlier that you've had a good
16 relationship with the North Dakota Commission --
17 Xcel has.

18 A. Yeah. One thing I would like to comment
19 is, I mentioned the MERP projects and I guess I
20 feel the more you understand about our business,
21 the better the decisions will be for the customers.
22 So when you took the time to visit some of our
23 power plants, understand what's there -- we know
24 you're busy, we know you've got a lot of things
25 going on, you need to figure out a way to do that,

1 but I think one thing we are fortunate is, we try
2 and share information with you so you understand
3 our business better, and in the end the better you
4 understand it, I think the better it is for you,
5 our customers and us.

6 Q. And I actually jotted that exact line
7 quote down from you, Kent, because I agree, and I
8 would go so far as to say that this Commission
9 seeks more information from Xcel Energy, that we're
10 hungry for it, and that that is part of the
11 relationship that you've talked about earlier, and
12 I appreciate -- and I might as well disclose, I did
13 visit the High Bridge plant, as you know, as well
14 as the Monticello plant, although those are the
15 only two. But you and I have visited a lot over
16 the last five years since I have been a
17 Commissioner, as well as other members of your
18 staff, about the topic of Xcel's lack of assets --
19 generating assets in North Dakota, have we not?

20 A. Yes.

21 Q. And I've made two trips to downtown
22 Minneapolis to meet with your CEO to express those
23 same things, have I not?

24 A. Yes.

25 Q. And so we've had numerous periodic

1 information exchange meetings with you and the
2 North Dakota staff, as well as several people from
3 the Minneapolis staff, where we've -- all three of
4 us and staff have expressed a lot of concern about
5 Xcel's lack of investment in North Dakota. Is that
6 true?

7 A. Yes.

8 Q. Some of those discussions have been rather
9 animated at times, haven't they?

10 A. I would agree with that.

11 Q. So I guess I struggle a little bit with
12 this notion that suddenly Xcel is willing to enter
13 into a collaborative process whereby staff and the
14 Public Service Commission of North Dakota could
15 express our desires or participate in the planning
16 process for resource development when, for five
17 years, we've basically been paid lip service.
18 Should I be -- should I now trust that from this
19 point going forward North Dakota is going to have a
20 louder voice than we've had in the last five years?

21 A. I think if you looked at the development
22 that we've done over the last five to ten years,
23 most of that has been through a bidding process,
24 people submit bids to us on where they can build
25 their plants, what's the least-cost option, and

1 basically we've evaluated those bids and the
2 results of those have determined where plants have
3 been built. I mean, it's -- we haven't forced it
4 one particular way or another. I think we moved
5 now towards an ownership as our goal on wind, and I
6 think it will help us determine better where we
7 locate some facilities, and I think it will balance
8 some things from that respect. So our basic
9 philosophy from the last five to ten years from
10 purchasing to ownership has changed and there is
11 commitment over the long haul to do that.

12 Q. Does Xcel Energy participate in the
13 Partners for Affordable Energy campaign in
14 Minnesota?

15 A. No.

16 Q. Why not?

17 A. We were a partner for a while in that
18 program, but we felt that the message was -- wasn't
19 the right balance between all resources, that it
20 was a strong push, almost completely on coal. We
21 thought the reaction in Minnesota would have been
22 negative rather than positive, and we didn't feel
23 it would improve -- improve the opportunities to
24 develop coal in North Dakota, for one thing. We
25 didn't feel it would be positive overall, felt it

1 wasn't balanced.

2 Q. So my understanding is the Partners for
3 Affordable Energy campaign is to help Minnesota
4 ratepayers understand the value of low-cost lignite
5 generated electricity. Is that not a noble goal?

6 A. I think that the Lignite Council's goal
7 with Partners for Affordable Energy is to help
8 Minnesota customers be more open to coal, coal use
9 to supply energy.

10 Q. Xcel doesn't support that?

11 A. We weren't comfortable that the message
12 was going to be effective.

13 Q. Does Xcel think that Minnesotans don't
14 have an adequate understanding of the benefits of
15 low-cost coal-generated electricity, or do you have
16 some other method that would help better educate --
17 more effectively educate Minnesota customers?

18 A. To help them understand the benefits of
19 coal?

20 Q. Yes. Since the Lignite Council's program
21 wouldn't be effective, do you have a more effective
22 program?

23 A. Our overall effective goal as a company is
24 similar to what I talked about before, and that is
25 having a mixture of resources. We have a mixture

1 of coal, we have a mixture of nuclear, hydro,
2 biomass, wind, all of those, and we support more of
3 a mixture and that's really where we're at in the
4 company rather than just focus on one particular
5 source. That was probably the difference overall
6 there.

7 Q. Okay. One of the things that has
8 concerned me a little bit, and I think we've talked
9 about this in the past, and Commissioner Clark got
10 to it in some degree and I think Mr. Bahr was
11 getting to it, as well, and that is this issue of
12 Minnesota legislation. Xcel participates obviously
13 in the legislature in Minnesota. I assume it
14 advocates for lower-cost electricity for its
15 customers, does it not?

16 A. Yes.

17 Q. And when the Minnesota legislature passes
18 legislation that actually adds costs, if those
19 costs can be simply passed on, whether it's through
20 some automatic mechanism in the law, itself, or by
21 commissions, what is Xcel's incentive to really
22 fight for better policy, lower-cost energy policy
23 as opposed to just simply advocating for
24 pass-through of those costs?

25 A. I think if you take a look at our overall

1 responsibility to our customers, it's good service,
2 good reliability and low-cost energy. And so if
3 you looked at any of those -- anything that's
4 discussed there, we're always looking to end up
5 with a reasonable balance over there, and I guess
6 if you had one or two in particular that we could
7 talk a little bit more about, I could understand
8 it. I will say that we worked extremely hard on
9 property taxes, and we always have. We feel we
10 need to continue to work on that, too.

11 Q. I might end up jumping around here a
12 little bit, so please bear with me.

13 Okay. Along those same lines then, you've
14 spent a lot of your testimony obviously talking
15 about the benefits of an integrated system to
16 everybody, including the little state guys like
17 North Dakota and South Dakota. Is there some line
18 that could be drawn where you'd say that's no
19 longer the case? Is there any policy that could be
20 passed by the Minnesota policymakers where you
21 would say, gee, I don't really think North Dakotans
22 ought to have to pay for that, or do you just
23 simply add it all to the sum total because it's
24 easier to get it from us than it is to put an asset
25 in North Dakota?

1 A. I'll give a couple comments. First of
2 all, when you say "a little state like North
3 Dakota," I personally spend a lot of my time
4 working with North Dakota, and I don't consider it
5 a little state. It's an important state to me
6 personally and to the company.

7 Q. I believe that, Kent, by the way.

8 A. I think if you take a look at the costs on
9 that, early on in Minnesota there was a Minnesota
10 preference for wind, a Minnesota preference for
11 wind location. We worked hard to avoid that in the
12 future. We did avoid that. And so there are
13 things that we look at to say how could we make it
14 reasonable and friendly across all the states that
15 we have. That's part of my job to look at that
16 from a Minnesota perspective and look at that with
17 our lobbyists to say, What can we do to improve
18 that overall situation? It is very, very important
19 to do that.

20 Q. You also testified to the value of the
21 larger customer base in Minnesota and how that
22 adds -- or actually lowers cost because you dilute
23 the cost by more people, it has a disproportionate
24 advantage to a smaller -- if not small, smaller
25 customer base in North Dakota, and that makes

1 pretty basic common sense. However, if that larger
2 customer base brings more higher costs by virtue of
3 where they live and the policies that are promoted
4 in their state, isn't that benefit actually
5 diluted?

6 A. I think you mentioned a couple things
7 there. One is the value of an integrated system,
8 and if you think about -- one of the benefits I
9 didn't mention earlier on the system is, if you
10 think about it even as a peak load on the system,
11 you look at North and South Dakota, they peak
12 slightly different times than the Twin Cities do,
13 and so you end up with some diversity there, you
14 have to build less generation there. Also, if you
15 take a look at Minnesota, you've got customers like
16 Marathon Oil that has almost a hundred percent load
17 factor that allows you to build those inexpensive
18 plants for base load, whether it's coal or nuclear,
19 so there's benefits there. But there's also --
20 like any partnership, there's things that aren't
21 advantageous. I think if you take a look at our
22 rates from last year and you think about out of the
23 29 regional utilities, North Dakota residential
24 customers had the lowest rates out of all 29, there
25 has to be some benefits there. There are some

1 positive things that are going on. There's some
2 challenges, I agree.

3 Q. Can you think of any legislation in the
4 past few years or several years, or maybe ever
5 since you've been involved, where North Dakota's
6 legislature passed laws that added costs for
7 customers in Minnesota -- your customers in
8 Minnesota?

9 A. I can't think of any right off the top of
10 my head.

11 Q. If North Dakota's legislature was to pass
12 a law that says North Dakota customers -- and this
13 is strictly hypothetical, but North Dakota
14 customers will not pay for wind resources that come
15 from a wind farm with a capacity factor of less
16 than 40 percent, would that simply fly in Xcel's
17 case and that any costs associated be passed on to
18 Minnesota customers?

19 A. I think that would start to deteriorate
20 the integrated system, would be the bad thing. I
21 can think of one law that has the potential to
22 increase costs for Minnesota customers depending on
23 how it's implemented and that's North Dakota's law
24 that says you can't -- I don't know exactly how
25 it's worded, but you can't consider future costs

1 of -- future costs for environmental issues when
2 you're doing your planning. If you take a look at
3 developing a plant, you need to take a look at what
4 are the initial costs, what are the future costs.
5 There's nothing in this case that's violated that
6 law, but does it have the potential in the future
7 to say let's ignore the future costs here and only
8 deal with the present, I think there are concerns
9 with that.

10 Q. But don't you think that's a bit of a
11 defensive mechanism that North Dakota, being the
12 smaller -- being the junior partner in the
13 partnership, since we like to use the term
14 partners, is simply using to defend against the
15 more intrusive, more expensive, more extreme
16 regulations in Minnesota? I mean, we can do very
17 little to defend ourselves. Isn't that simply just
18 a defense against that?

19 A. I'm not sure why it was implemented, but I
20 will say that our overall costs to our customers
21 here are generally favorable. I know a rate
22 increase like this for customers is not easy, but I
23 do think the costs are overall reasonable.

24 Q. You also testify in your rebuttal
25 testimony that we need to meet the applicable

1 requirements of each state and community in which
2 we serve and which our facilities are located, but
3 doesn't that really mean you need to meet the most
4 extreme of one state -- the most extreme
5 regulations of one state and the most extreme laws
6 of one state? In other words, you meet all of the
7 laws when you meet the most extreme ones, in this
8 case Minnesota, because North Dakota really doesn't
9 have very many restrictions on energy development?

10 A. If it is -- if it is -- I'd say wherever
11 the -- whatever the law is, first we need to say,
12 is it reasonable for the customer and then if it
13 isn't, we need to try and address it. If it
14 passes, anyway, we need to figure out a way to
15 accomplish what's set out in the law, wherever the
16 needs are.

17 Q. Okay. I want to get into natural gas
18 issues a little bit, because next to this issue of
19 associating costs to certain jurisdictions,
20 probably the natural gas issue is one you and I
21 have talked the most about over the years. You are
22 a member of the American Gas Association board
23 currently?

24 A. Yes.

25 Q. And have been for some time?

1 A. Yes.

2 Q. And don't high gas prices benefit most AGA
3 members?

4 A. Actually, high gas prices in general don't
5 benefit hardly any AGA members, because other gas
6 utilities around the country are similar to us in
7 the price of gas is actually a pass-through cost
8 and it's really on the delivery where you make
9 money. And in general with most utilities, the
10 higher the prices are, the lower gas you supply the
11 customer and so the revenues go down, so generally
12 it has a negative impact on almost all customers --
13 almost all utilities.

14 Q. Aren't there several members of the
15 American Gas Association that are producers of
16 natural gas?

17 A. Some are, but there's substantially more
18 members that are delivery companies.

19 Q. I think it might be helpful for the record
20 just to note there's been talk about the 90 and the
21 95 percent new generation being natural gas, and
22 Commissioner Clark finally got you to the point
23 where we all, I think, agree there has been a
24 substantial increase. I did find, Your Honor, and
25 if it's helpful or appropriate, put it into the

1 record, finding 2004 NRRI report that was authored
2 by Ken Castillo. You know Ken Castillo, Kent?

3 A. I don't know if I know him.

4 Q. I knew him from my work on the gas
5 committee. That states over 90 percent of new
6 generation capacity since 1996 -- so that would
7 have been 1996 to 2004 -- has been gas fired and
8 then it goes on to talk about that. So I might
9 just want to add this to the record at some point
10 where it's appropriate?

11 JUDGE WAHL: Can you have that reduced to
12 a document, Commissioner, and --

13 COMMISSIONER CRAMER: I certainly can.

14 JUDGE WAHL: -- perhaps make it part of
15 the record? Provide a copy to counsel.

16 COMMISSIONER CRAMER: I will do that.

17 Q. (COMMISSIONER CRAMER CONTINUING) I think
18 Commissioner Clark was -- or maybe it was Mr. Bahr
19 was getting to this point, but in the world of
20 electric generation fuels, does natural gas tend to
21 be the cost follower or the cost leader?

22 A. I guess -- I know there's a relationship.
23 I can't tell you the answer to that question. I
24 don't know for sure myself. I know there's strong
25 relationships there.

1 COMMISSIONER CRAMER: Mr. Bahr also was, I
2 think, struggling to get some clarity -- and
3 perhaps a future witness will be able to provide
4 this, but some clarity on the volatility of natural
5 gas over the short and long term versus coal over
6 the same period of years, and I don't think we were
7 clear on that exactly. But I'm wondering if maybe
8 we couldn't find, either between Xcel or staff, a
9 chart -- and I know that there was one in the Big
10 Stone II case provided by I think it was a Mr.
11 Klein, Daniel Klein, who was a natural gas expert
12 witness that demonstrated the volatility of the two
13 fuel sources over the long term, and I think that
14 might be a helpful document to find a copy of and
15 place in the record.

16 MR. BAHR: Mr. Commissioner --

17 COMMISSIONER CRAMER: Yes.

18 MR. BAHR: -- I believe we were going to
19 follow up with that with Ms. Engelking and use that
20 exhibit.

21 COMMISSIONER CRAMER: Okay.

22 Q. (COMMISSIONER CRAMER CONTINUING) You also
23 testified with regard to natural gas rather
24 optimistically, I thought, about the value. I
25 think your quote was you could liquefy natural gas

1 from around the world because there's such a global
2 supply. Does Xcel Energy advocate creating greater
3 dependence on foreign sources of energy and global
4 markets for generating electricity?

5 A. What we would do is, we advocate for
6 increasing supply of natural gas overall. I would
7 say there are opportunities offshore within the
8 U.S. that should be developed. There's
9 opportunities in Colorado. There's opportunities
10 in Alaska. On each one of those specifically we
11 don't have an opinion, but we do support increased
12 supply. In addition to that, if you increased
13 supply by liquefying natural gas, we think that's
14 important. I think if you take a look at a
15 residential customer and you think about the
16 natural gas prices, a lot of us realize that
17 there's challenges for some people to pay the bill
18 and we need to look at all opportunities to
19 increase that supply.

20 Q. But if we become further dependent on
21 foreign natural gas through the LNG process, aren't
22 we taking a giant step backwards in terms of
23 national energy policy in this country? Aren't we
24 trying to diminish our dependence, not just on
25 foreign sources, but then on global markets because

1 of the growth in places like China and India that
2 are driving up the costs of this precious resource,
3 because it's my view --

4 COMMISSIONER WEFALD: What's your
5 question?

6 COMMISSIONER CRAMER: Excuse me. I didn't
7 interrupt you.

8 Q. (COMMISSIONER CRAMER CONTINUING) It's my
9 view, Kent, that natural gas prices aren't going to
10 come down. You probably heard me say there's a new
11 floor. My point is, we've discussed this concern
12 for a long, long time and yet I hear you advocating
13 for greater dependence on foreign resources and
14 then plus the global marketplace is driving those
15 prices up. Does that seem like a reasonable policy
16 to you?

17 A. I would say advocating for additional LNG
18 is a strong statement compared to where I said. I
19 said we want to increase supply. The other thing
20 as a company that we want to do is, we want to
21 increase conservation both on the electric and gas
22 side. On the gas side we've got some programs up
23 here. Hopefully they're helping the customer. On
24 the electric side we've got a filing to help
25 customers reduce their energy consumption. So the

1 cheapest source of energy is actually the energy
2 that's not used in the first place, and so that's
3 our number one alternative. The second alternative
4 is to increase supply overall so we can end up with
5 a reasonable price. We aren't actively out
6 promoting any of those at this time, but we do
7 support an increasing supply.

8 Q. Xcel's CEO has advocated rather
9 aggressively environmental regulation, has he not?

10 A. He's been a strong supporter, as the
11 company is, of the environment, that's correct.

12 Q. And the costs -- the extra costs
13 associated with some of those regulations? It's
14 okay. I'm going to move on.

15 I just want to get into one other area
16 that has been touched on and that is the area of
17 transmission and other companies that have built
18 generation and transmission along with it to move
19 the energy along. And these are just since I have
20 been on the Commission, which is a relatively short
21 time. I think Commissioner Clark talked about
22 Minnesota Power and Minnkota. You're familiar that
23 we currently sited about 60 miles of new
24 transmission into the Maple River Substation for
25 wind --

1 A. Yes.

2 Q. -- power? That took, I think, a couple of
3 months, maybe three months to do. We also -- I
4 think it took us about 60 days to site the
5 transmission line up in -- to support the Wilton
6 Wind Farm for Basin Electric and FPL. Does that --
7 do you recall that?

8 A. I'm not aware of that, but if you say it
9 did, I would agree with you, Commissioner.

10 Q. Somebody else already talked about Great
11 River Energy and Coal Creek and you talked about
12 utilizing some of that energy for citizens of
13 Minot. Are you aware that GRE is currently
14 building a 100 -- roughly 100-megawatt plant near
15 Jamestown, North Dakota?

16 A. I'm vaguely familiar with that project,
17 yes.

18 Q. Well, the reason I bring that up is
19 because this prospect of cogeneration facilities,
20 where they're utilizing the steam for an ethanol
21 plant and a malting barley plant seems to have some
22 attractiveness. Has Xcel ever looked for those
23 types of partnerships for building smaller pockets
24 of generation that could be maximized and
25 productive with -- combined with renewable

1 resources, renewable development?

2 A. We do have a cogeneration facility right
3 now with Liberty Paper next to our Sherco plant
4 which provides them steam. It's economical for
5 them and it's economical for our customers, too,
6 the rest of them, so I think that is positive. If
7 you've got some ideas on some particular ones, we
8 would be happy to sit down and talk with you about
9 it, see what thoughts and ideas there are.

10 Q. I appreciate that invitation. I'm sure
11 we'll be able to take you up on it. There's one
12 more.

13 You talked about service, that customers
14 are happy. Do you know if in the last -- if
15 there's a trend in the last five or ten years, say,
16 of customer service improving in North Dakota? And
17 I guess the only way to know that would be through
18 some sort of charting of customer complaints. Has
19 it been better, worse, roughly the same; do you
20 know?

21 A. We've actually -- we track customer
22 satisfaction over time every year, and I know when
23 we made some changes with our billing system
24 probably about four or five years ago, we saw a dip
25 in it there and we had some issues with

1 implementing that, and so we did see a dip, but we
2 have seen it go back up to the levels that we saw
3 before. If you looked at the customer satisfaction
4 in North Dakota, it's been probably the best in the
5 company on average for probably the last 20 years.
6 So overall we've done a good job with customers.

7 COMMISSIONER CRAMER: I think that's all
8 that I have in terms of questions for this witness.
9 I might, though, just direct to staff, if I could,
10 one thing I think would be helpful would be if
11 sometime during this proceeding if we could get a
12 comparison chart maybe tracking transmission site
13 -- transmission build-out in North Dakota for the
14 last, say, five years and the regulatory timeline
15 for that compared to similar projects in Minnesota.

16 COMMISSIONER WEFALD: We would ask for
17 advice from Jerry and Illona, our advisers.

18 COMMISSIONER CRAMER: Right. Is that
19 doable, Jerry?

20 MR. LEIN: Sounds like quite a bit of
21 work.

22 COMMISSIONER CRAMER: All right. That's
23 all I have.

24 JUDGE WAHL: Anything further?
25 Commissioner Clark.

1 COMMISSIONER CLARK: Just a couple --
2 thank you -- on the natural gas issue.

3 **FURTHER EXAMINATION**

4 **BY COMMISSIONER CLARK:**

5 Q. Are familiar with, what is the delivered
6 cost of LNG right now? Do you have any idea? What
7 is it clearing at?

8 A. I don't know what the actual delivered
9 cost of it is right now.

10 Q. Okay.

11 COMMISSIONER WEFALD: I have one.

12 Q. (COMMISSIONER CLARK CONTINUING) Just a
13 couple more. Are you aware of what countries -- we
14 talk about sort of foreign LNG. What countries are
15 the biggest LNG providers in the world? Are you
16 familiar with those, if you were to list the top
17 five or ten?

18 A. There's a lot of -- there's a lot of
19 natural gas in South America, a lot of natural gas
20 in Russia. There's other, too.

21 Q. Russia, Venezuela, Iran?

22 A. I think there's in Iran, too.

23 Q. Saudi Arabia?

24 A. We could get more detailed information
25 than I have off the tip of my tongue.

1 COMMISSIONER CLARK: Actually, if that
2 could be provided where the top LNG-producing
3 countries are.

4 THE WITNESS: We could do that for you.

5 JUDGE WAHL: Is that a request for a
6 late-filed exhibit, Commissioner?

7 COMMISSIONER CLARK: It is, yes.

8 JUDGE WAHL: All right. For the record,
9 counsel, by my reckoning, that would be Exhibit 25.
10 And where are we at? Is Xcel is going to produce
11 that information? All right. It will be Exhibit
12 25.

13 THE WITNESS: Yes.

14 JUDGE WAHL: All right. It will be Xcel
15 late-filed exhibit for what, major sources of
16 natural gas production worldwide?

17 COMMISSIONER CLARK: Top ten producing --
18 exporting countries -- either producing or
19 exporting countries in the world.

20 JUDGE WAHL: All right. Any further
21 questions from the -- Commissioner Clark.

22 COMMISSIONER CLARK: Just one quick one.

23 Q. (COMMISSIONER CLARK CONTINUING) I once
24 heard, I think it was, Sam Bodden, the U.S.
25 Secretary of Energy -- if I'm wrong on the quote, I

1 apologize -- say something along the lines of using
2 natural gas to produce electricity is kind of like
3 using your best scotch to wash your dishes. Do you
4 agree with that statement or not, or does Xcel
5 agree with that statement?

6 A. I will say that if you have to -- take a
7 look at your -- take a look at your overall
8 resource plan and you need -- some resources are
9 best for base load, some are best for intermediate
10 and some are best for peaking. And the peaking
11 plants are ones that you want to put low capital in
12 because you're not going to use them that often,
13 they have higher operating costs. And if you
14 looked at it from a customer perspective on cost,
15 that natural gas does play an important role there.
16 And I think if you use it appropriately, which I
17 believe we are -- percentagewise we aren't very
18 high at all, that --

19 Q. You'll move to about 20 percent; is that
20 correct?

21 A. What's that?

22 Q. Under Xcel's proposed pathway of
23 generation in the future, you'll move from 8
24 percent to about 20 percent natural gas?

25 A. I believe the 20 percent you're quoting is

1 capacity factor. What I'm talking about is energy,
2 so how much you actually use. So from a capacity
3 we would have the ability to do 20 percent, but
4 from an energy, for gas used it's more like in the
5 10 percent range or less.

6 Q. And just to tie that together with, I
7 think, a question that Mr. Bahr asked, but I'm not
8 sure if translation ever made it through exactly
9 right -- at least I think where he was going with
10 it -- on those natural gas-fired units, the peaking
11 units that you said, you know, the sunk costs are
12 lower, but the fuel costs are more important; is
13 that accurate? So when you're talking about these
14 peaking units, the delivered cost is
15 disproportionately as compared to, say, a coal
16 plant through -- translated through the cost of the
17 fuel, itself; is that right?

18 A. If you think about it -- Betsy can
19 describe this better than I can, but if you spend a
20 lot of money to build a plant that you only use
21 for, you know, maybe 50 or a hundred hours a year,
22 the cost per kilowatt-hour for the capital portion
23 of that is extremely high.

24 Q. Right.

25 A. And even if the fuel is free, it's still

1 very, very high, so really what you want to do is
2 you want to end up with a low capital cost for
3 peaking and then you can afford to spend more on
4 the operating cost. Betsy can probably give you a
5 better explanation than I can to help you
6 understand a little bit better than I can.

7 Q. Okay. But as far as the total cost of a
8 natural gas-fired unit, the commodity cost of
9 natural gas, itself, is a much bigger proportion of
10 that total cost than other forms of generation; is
11 that accurate?

12 A. Yes, that's true.

13 COMMISSIONER CLARK: Okay. Thanks.

14 JUDGE WAHL: Commissioner Wefald.

15 COMMISSIONER WEFALD: Yes.

16 **FURTHER EXAMINATION**

17 **BY COMMISSIONER WEFALD:**

18 Q. You make some point today regarding that
19 it's been -- you had a rate case in 1992, '93 and
20 then there's been changes in the rates up and down
21 and then you went through PBR for five years and
22 now you're in for the next major rate case.

23 A. Yes.

24 Q. What -- do you remember what year the
25 merger occurred between Xcel in -- before it was

1 Xcel, when it was Northern States Power and then it
2 merged with the companies in the southwest?

3 A. 2000.

4 Q. 2000?

5 A. Yes.

6 Q. And didn't at that time you tell the
7 Commission that electric rates would go down for a
8 number of years as a result of the advantages of
9 the merger, the economics of the merger?

10 A. I don't believe that we said that the
11 rates would go down. What we said is operating as
12 a --

13 Q. Costs would go down?

14 A. We said that overall we would do a better
15 job managing cost increases. Some costs would go
16 down because you're able to share those across.
17 Our purchasing power would be better. It has been
18 better, and so we're able to buy things at a more
19 economical price there. Had we not had the merger,
20 our costs would be higher than what they are today.
21 I don't believe that we actually said there would
22 be a price decrease, though.

23 Q. You did say that your costs would go down?

24 A. The costs would be less than if we didn't
25 merge. So you're going to have a normal price

1 increase over time just due to higher health care
2 benefits, investments in the system, and a lot of
3 different things have upward pressure on your
4 costs. The merger helped us keep those costs lower
5 than they would have been otherwise.

6 Q. Thank you. Then when you testified
7 that -- you say that you're first out of 28
8 companies. Have you calculated what your rate
9 would be if this rate increase goes through?

10 A. It's actually 28 other customers, so a
11 total of 29, and we'll actually do that calculation
12 at the end of this year to determine where they'll
13 actually be. It's hard to determine what other
14 companies are going to do as far as price, whether
15 it's going to -- where prices will be and so --

16 Q. But that is prior to this rate increase
17 application?

18 A. Yes, it's the end of 2007. We'll do
19 another one the end of 2008.

20 COMMISSIONER WEFALD: Thank you.

21 JUDGE WAHL: Any further questions from
22 the Commission? Followup, Ms. Hertzler?

23 MS. HERTZLER: Yes, Your Honor, just a
24 couple of questions.

25

REDIRECT EXAMINATION

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BY MS. HERTZLER:

Q. Mr. Larson, if you were designing a system to be the lowest overall cost, would you build only base load coal plants?

A. No, I would not. Actually, if you built just base load coal plants for peaking load, it would be substantially more expensive than having a mixture of resources because of the capital cost investment with coal.

Q. And is coal always the least-cost resource?

A. No. If you went to a peaking needs in particular, coal is probably one of the most expensive options because of the high capital costs. As we talked about earlier, natural gas is more cost-effective for that type of use.

Q. And taking you to the questions that Mr. Bahr had with regard to the MERP project, he talked about the legislation, was there a proceeding before the Minnesota Public Utilities Commission involving MERP?

A. Yes. I wasn't as clear on that as I should have been. Actually what the legislature did is they passed legislation that allowed the

1 Public Utilities Commission to put in place some
2 kind of rider recovery in there. What we needed to
3 do is actually take our plans to the Minnesota
4 Public Utilities Commission. We did that in 2003.
5 They had the ability to accept or reject that.
6 They had to approve the plans that we had. It took
7 us more than a year to move through that
8 proceedings. There was many, many intervenors in
9 it, so there was lot of discussion, lots of
10 thorough evaluation of the MERP project overall, so
11 it wasn't just passed by the legislature. They
12 just gave enabling language to allow the Commission
13 to do that.

14 Q. Thank you. If you know, could you tell us
15 where Otter Tail Power's load is located?

16 A. It's my understanding about half their
17 load is in Minnesota and about half of it is in
18 North Dakota. They have a small amount in South
19 Dakota, too, but generally it's close to that.

20 Q. And would you know where MDU's load is
21 located?

22 A. The vast majority -- nearly all of MDU's
23 load is -- a good portion of it is in North Dakota.
24 I'm not sure how much is -- how much of it is in
25 Montana, but I know there's a good portion of it's

1 here. I don't know off the top of my head.

2 MS. HERTZLER: Thank you, Mr. Larson.

3 JUDGE WAHL: Followup, Mr. Bahr?

4 MR. BAHR: Just a few.

5 **RECROSS-EXAMINATION**

6 **BY MR. BAHR:**

7 Q. Mr. Larson, you keep talking about peak
8 plants, and I understood based upon the testimony
9 that these two gas plants we're talking about will
10 not operate as peak plants, but as intermediate
11 plants. Is my understanding incorrect?

12 A. Are you talking about the Riverside and
13 High Bridge plants?

14 Q. Yes.

15 A. In general, they were more intermediate
16 plants.

17 Q. And so the cost advantage, so to speak, is
18 less because intermediate is running more than a
19 peak plant would; correct?

20 A. Actually, if you take a look at that, you
21 need to combine the Riverside, High Bridge and
22 Sherco plants and take a look at the overall
23 operations of those. It's not just those two
24 plants because Sherco is not running at a hundred
25 percent more like you run a base load plant, and

1 the overall effect is the gas plants are a better
2 match for the load, getting Sherco closer to a base
3 operating plant than what it was before. And the
4 two older coal plants didn't have the ability to
5 fluctuate up and down like the new gas-fired plants
6 will.

7 Q. But these plants will be intermediate
8 plants; correct?

9 A. Intermediate and peaking. Betsy can
10 answer that question better than I can.

11 MR. BAHR: Nothing further.

12 JUDGE WAHL: Any further questions from
13 the Commission? All right. Next, Ms. Hertzler.

14 MS. HERTZLER: Your Honor, in my
15 excitement to get Mr. Larson up this morning, I
16 omitted getting in the first three of my exhibits
17 and if I could do so now, I would greatly
18 appreciate it.

19 JUDGE WAHL: Certainly.

20 MS. HERTZLER: My first exhibit is going
21 to be Xcel Energy's application, and that has been
22 marked as Exhibit 1. Exhibit 2 is volume 2 of our
23 application that includes our proposed tariffs and
24 our interim tariffs. And then Exhibit 3 is a
25 stipulation with staff, including a cover memo

1 authored by Mike Diller, and I would offer all
2 three of these exhibits into the record.

3 JUDGE WAHL: Mr. Bahr?

4 MR. BAHR: No opposition.

5 JUDGE WAHL: Exhibits 1, 2 and 3 are each
6 received. Next, Ms. Hertzler.

7 MS. HERTZLER: Your Honor, we would call
8 Al Krug, and he is one of our witnesses who will be
9 testifying by phone.

10 JUDGE WAHL: All right. Let me see how
11 this works for me.

12 COMMISSIONER WEFALD: He's testifying on
13 wholesale margins; isn't that correct?

14 MS. HERTZLER: Yes, Commissioner.

15 JUDGE WAHL: Mr. Krug, this is Al Wahl at
16 the North Dakota Public Service Commission hearing
17 rooms.

18 MR. KRUG: Yes.

19 JUDGE WAHL: You have been called to
20 testify on behalf of Northern States Power in this
21 matter.

22 MR. KRUG: Correct.

23 JUDGE WAHL: Mr. Krug, as you're probably
24 well aware, your testimony is required to be under
25 oath and I'm required by law to advise you

1 regarding perjury before administering the oath.

2 MR. KRUG: Okay.

3 JUDGE WAHL: Perjury is a false statement
4 of material fact which you do not believe to be
5 true; in other words, generally speaking, a lie.
6 In North Dakota perjury is a Class C felony,
7 punishable by a fine up to \$5,000, imprisonment for
8 a period of up to five years, or both.

9 **ALLEN KRUG,**
10 being first duly sworn, was examined and testified
11 as follows:

12 JUDGE WAHL: Ms. Hertzler.

13 **DIRECT EXAMINATION**

14 **BY MS. HERTZLER:**

15 Q. Mr. Krug, could you please state your name
16 and title for the record, please?

17 A. My name is Allen D. Krug and I am the
18 director of regulatory administration for Xcel
19 Energy.

20 Q. And did you submit testimony in this
21 proceeding, Mr. Krug?

22 A. Yes, I did.

23 Q. What testimony did you submit?

24 A. I submitted direct testimony and rebuttal
25 testimony.

1 Q. Do you have any corrections, additions or
2 edits to that testimony?

3 A. No, I do not.

4 MS. HERTZLER: Your Honor, at this time I
5 would like to offer Exhibit 6, which is Mr. Krug's
6 direct testimony, and Exhibit 7, which is Mr.
7 Krug's rebuttal testimony.

8 JUDGE WAHL: Mr. Bahr?

9 MR. BAHR: No objection.

10 JUDGE WAHL: Exhibits 6 and 7 are each
11 received.

12 MS. HERTZLER: I have nothing further,
13 Your Honor.

14 JUDGE WAHL: Mr. Bahr?

15 MR. BAHR: Advocacy staff does not have
16 any questions of this witness.

17 JUDGE WAHL: Does the Commission have any
18 questions? Commissioner Wefald.

19 COMMISSIONER WEFALD: Yes.

20 **EXAMINATION**

21 **BY COMMISSIONER WEFALD:**

22 Q. You make a distinction between -- in your
23 testimony between nonasset-based margins and asset-
24 based margins; correct?

25 A. Yes.

1 Q. Okay. And in the area of nonasset-based
2 margins -- and just to make sure that I have this
3 straight, nonasset-based margins are when the
4 company is not -- is selling power that is not
5 owned by the -- where the assets are -- where the
6 generating assets are not owned by the company;
7 isn't that correct?

8 A. Yes, that is -- that is correct. The --

9 Q. Would you give a --

10 A. -- sold is not being sold off of any of
11 our units. That would also include, just to be
12 clear, any of our purchase power agreements, as
13 well.

14 Q. All right. Now, in your testimony on page
15 3, it says, in my direct testimony, I propose
16 returning 15 percent of net aggregate margins
17 derived from nonasset-based trading to customers.

18 A. Correct.

19 Q. And that -- so it sounds like that that's
20 a good thing because 85 percent would be retained
21 by the company and 15 percent of these, even though
22 they're not owned by customers, would be -- would
23 be returned to customers?

24 A. Correct.

25 Q. But my question is this: What are the

1 costs that are incurred by customers in order to
2 have this nonasset-based trading take place? How
3 many employees are used in this area? And in
4 general my question is, what is this costing North
5 Dakota ratepayers in your filing? Where are the
6 numbers that show what is this costing North Dakota
7 ratepayers for us to get back 15 percent of the net
8 aggregate margins from nonasset-based trading?

9 A. Commissioner Wefald, many of the -- I'll
10 try to break that down. Many of the -- first of
11 all, the costs of a -- for example, let's say a
12 particular transaction was a simultaneous purchase
13 of energy and then a sale to a third party and none
14 of those transactions were based upon our assets,
15 that would fall into the nonasset category. It
16 would only be the profit from that. And then -- so
17 that the costs are already accounted for there in
18 the transaction. I think perhaps what you might be
19 getting to is what additional sorts of costs, for
20 example, employee and overhead costs --

21 Q. That's right, exactly.

22 A. -- are involved. And I could answer that
23 to a certain extent and then there may have to be
24 some additional followup from one of our financial
25 witnesses. However, most of the costs -- we don't

1 have employees or separate systems for these types
2 of transactions. The same employees that are
3 making transactions on behalf of our -- to secure
4 load and sell off of our generating units are also
5 attempting at the same time to provide, you know --
6 excuse me -- to transact, when they can, when
7 opportunities arise.

8 Q. Why isn't that a separate division?

9 A. Well, we see that there's a pretty clear
10 nexus that we created, except it is a regulated
11 activity at this time.

12 Q. Just describe to me what you mean by it's
13 a regulated activity at this time.

14 A. Well, as I say, all of the costs and --
15 all of the costs that are associated with this
16 activity are included in our general rate petition
17 and all of these benefits -- the entire activity is
18 concerned across the line.

19 Q. Yeah, but if -- if all of the costs for
20 running this, all of the employees are in -- then
21 there is significant cost connected with this, and
22 what I want to do is compare the 15 percent that
23 you're proposing -- the company is proposing that
24 would be returned to North Dakota ratepayers versus
25 the costs of running this program, of having it in

1 place. So is there -- is that broken down or do
2 you need to file that with me as a late-filed
3 exhibit?

4 A. Commissioner Wefald, that probably needs
5 to be addressed more directly by a financial
6 witness where the allocations between those two
7 activities, meaning the asset-based and the
8 nonasset-based are discussed, and so there are
9 allocations and assignments between those two
10 activities. The employees have to report on an
11 hourly basis what their activities are. Also, I
12 should just add that we have rules that require
13 the -- our personnel that are making these
14 transactions to always look to -- the first
15 priority is always to secure energy or sell energy
16 on behalf of the asset-based activities because
17 those are the activities where either -- those are
18 the activities dedicated to our ratepayers. And as
19 I say, some of these -- there is some allocations,
20 but I think what I'm trying to say is the
21 incremental cost of this activity is extremely
22 small, perhaps zero, because the same systems --
23 computer systems and employees that are doing one
24 activity are also doing the other. So we see it as
25 an incremental benefit that we have proposed to

1 share with our ratepayers.

2 Q. Who would be the correct person to file
3 the cost allocations?

4 A. I'm probably going to need a little help
5 on that one, Commissioner. I apologize, but
6 perhaps my attorney might be able to track down the
7 right witness on that.

8 MS. HERTZLER: Commissioner Wefald, if I
9 may interject, I believe that the question -- or
10 the person who could probably help most would be
11 Anne Heuer, who will be testifying later.

12 COMMISSIONER WEFALD: Thank you. That's
13 all the questions I have on this.

14 JUDGE WAHL: Any further questions from
15 the Commission? Commissioner Clark.

16 **EXAMINATION**

17 **BY COMMISSIONER CLARK:**

18 Q. If you could just help me understand a
19 little bit more about the nonasset-based sales and
20 what the people who work in that division are doing
21 on a day-to-day basis. Is it a -- are they -- I
22 don't know if this is an unfair characterization.
23 Are they playing the market?

24 A. Commissioner Clark, generally not playing
25 -- I guess, let me step back. These transactions

1 are quite different than the transactions that are
2 the asset-based, meaning that whenever we have
3 extra power, excess energy we sell it into the
4 system. These transactions do on occasion entail
5 some risks. For example, a trader could purchase
6 -- purchase energy at a hub at a certain point in
7 time and then attempt to sell it at some point
8 later for profit, but there also could be a loss.
9 I should point out, though, that we have a risk
10 management policy that governs all of their
11 transactions and they're tightly monitored to limit
12 these risks and control those risks, so the risks
13 are fairly small. In addition, in our proposal we
14 propose to only share calendar year aggregate
15 positive margins. If we do have any calendar
16 losses, the company is proposing to completely bear
17 those losses and there will be no negative impacts
18 on ratepayers.

19 Q. Forgive me if this is a very basic
20 question, but why have nonasset-based sales at all?
21 If you're -- I'll just leave it at that. Why is
22 it -- why is it the utility's interest to be in the
23 business of nonasset-based sales?

24 A. Commissioner Clark, I tried to address
25 that briefly in my testimony. One of the things

1 that we found is -- as you probably know, the
2 company is generally a net buyer of energy on
3 behalf of our customers, and what we found if all
4 we're doing is buying on behalf of our customers,
5 it's very easy for other third parties to
6 understand when it is we're in need of energy and
7 price accordingly and so it puts us at a fairly big
8 disadvantage. Second -- so, therefore, if we don't
9 -- I should back up. We don't let other parties
10 know whether we're buying for the system or
11 nonasset-based. They're completely blind to that.
12 So we could be offering to sell on occasion at the
13 same time that we're buying and that masks our
14 need, which is a good thing for our ratepayers. We
15 don't want to be at a competitive disadvantage.
16 Plus, as we're operating in a variety of hubs and
17 key points on our system, we also gave a lot of
18 market knowledge and that, again, helps us secure
19 cheaper energy for our customers. So those are two
20 very important reasons. And then, third, it's a
21 natural step for our traders to take that the
22 opportunities are there, they have a lot of market
23 knowledge and we're able to provide that additional
24 benefit. I think in other companies -- we have it
25 broken out that way due to our multi-

1 jurisdictional or our operating company, of course,
2 to our system. Other companies are doing the same
3 transaction, but simply not breaking it out between
4 asset-based and nonasset-based. So I don't think
5 we're really doing anything that unusual. It's
6 pretty much a natural process for movement from
7 asset-based to nonasset-based because of, you know,
8 the nexus between the two activities.

9 COMMISSIONER CLARK: That's all I have.
10 Thanks.

11 JUDGE WAHL: Any further questions from
12 the Commission? Followup, Ms. Hertzler?

13 MS. HERTZLER: Yes, Your Honor.

14 **REDIRECT EXAMINATION**

15 **BY MS. HERTZLER:**

16 Q. Mr. Krug, if the company did not transact
17 any nonasset-based sales, would the costs for the
18 employees and overhead be reduced?

19 A. Commissioner, I'm not sure that I could
20 adequately answer that question. I would say that
21 it is unlikely that there would be any significant
22 cost reduction, but given that I don't know all of
23 the allocations and all of the costs associated
24 with it, I don't want to misrepresent that fact.

25 MS. HERTZLER: Thank you, Your Honor. I

1 have nothing further.

2 COMMISSIONER WEFALD: It shows that we
3 should identify ourselves as we're asking our
4 questions.

5 JUDGE WAHL: Well, except I announce each
6 person, Commissioner. Mr. Bahr?

7 MR. BAHR: I don't have a question of the
8 witness, but if counsel could just identify who the
9 later witness is that could answer Commissioner
10 Wefald's question so we know when that person might
11 be up.

12 MS. HERTZLER: That would be Ms. Anne
13 Heuer.

14 JUDGE WAHL: Nothing further, Mr. Bahr?

15 MR. BAHR: Nothing.

16 JUDGE WAHL: Anything further from the
17 Commission?

18 COMMISSIONER CLARK: No.

19 JUDGE WAHL: All right. Thank you very
20 much, Mr. Krug. You may simply hang up your phone.

21 THE WITNESS: Okay. Thank you.

22 MS. HERTZLER: Your Honor, we would call
23 Jannell Marks. And I would just note for
24 Commissioner Clark when he asked the question with
25 regard to load growth of Mr. Larson, that may be an

1 appropriate question for Ms. Marks.

2 COMMISSIONER CLARK: Thank you.

3 JUDGE WAHL: Ms. Marks, this is Al Wahl at
4 the North Dakota Public Service Commission hearing
5 room, and you have been called to testify as a
6 witness on behalf of Northern States Power Company,
7 Xcel Energy. As you're probably aware, Ms. Marks,
8 your testimony is required to be under oath and I'm
9 required by law to advise you regarding perjury
10 before administering the oath. Perjury is a false
11 statement of material fact which you do not believe
12 to be true; in other words, generally speaking, a
13 lie. In North Dakota perjury is a Class C felony,
14 punishable by a fine up to \$5,000, imprisonment for
15 a period of up to five years, or both.

16 **JANNELL MARKS,**

17 being first duly sworn, was examined and testified
18 as follows:

19 JUDGE WAHL: Ms. Hertzler.

20 MS. HERTZLER: Thank you, Your Honor.

21 **DIRECT EXAMINATION**

22 **BY MS. HERTZLER:**

23 Q. Ms. Marks, would you please state your
24 name and title for the record?

25 A. Yes. My name is Jannell Marks. My title

1 is director, energy and demand forecasting.

2 Q. Ms. Marks, did you submit testimony in
3 this proceeding?

4 A. Yes, I did.

5 Q. Did you submit direct testimony?

6 A. That is correct.

7 MS. HERTZLER: Your Honor, I would at this
8 time move submission of Exhibit 8, which is the
9 direct testimony of Jannell Marks.

10 JUDGE WAHL: Mr. Bahr?

11 MR. BAHR: No objection.

12 JUDGE WAHL: Exhibit 8 is received.

13 MS. HERTZLER: Ms. Marks is available for
14 questioning.

15 JUDGE WAHL: Mr. Bahr?

16 MR. BAHR: Advocacy staff have no
17 questions for this witness.

18 JUDGE WAHL: Commissioners. Commissioner
19 Wefald.

20 COMMISSIONER WEFALD: Yes.

21 **EXAMINATION**

22 **BY COMMISSIONER WEFALD:**

23 Q. On page 5 of your direct testimony, your
24 figures are interesting. On that page you talk
25 about -- I'll just read it. "As I stated earlier,

1 the total number of electric customers in the Xcel
2 Energy North Dakota service territory increased at
3 an average annual rate of .4 percent from 1998
4 through 2006." And that's the number of electric
5 customers. And then during the 2008 test year,
6 however, the total number of electric customers is
7 expected to increase by 1 percent compared to 2006
8 customer levels, or a .5 percent average annual
9 growth rate. So the number for -- the number of
10 customers that you're anticipating to serve, there
11 was significant increase in the number of customers
12 compared to the past 10 years growth. How does
13 this projected growth in customer numbers affect
14 the amount of the dollar increase Xcel is
15 requesting? Is there a link? Why is this number
16 important, I guess, is one question? And then the
17 significant increase in number of customers that
18 you're showing for this test year compared to the
19 last 10 years, how does that affect the amount of
20 the dollar increase Xcel is requesting?

21 A. First of all, I'd like to explain that
22 that 870 customers that we're expecting to add is
23 over a two-year time period, and so that's an
24 average of 435 per year, which compares to the 303
25 over the historical time period.

1 Q. All right.

2 A. Okay. And then -- so the annual growth
3 rates that are comparable is the 0.4 percent versus
4 the 0.5 percent average annual growth rate. And
5 then the number of customers is used in
6 determination of revenue requirements in that I
7 believe we collect a service and facility fee on a
8 per-customer basis, which is a part of the rate
9 design.

10 Q. And so can you explain to me -- I know you
11 have all of the diagrams in the back and all of
12 your statistical studies, but it was very
13 interesting to me that it went -- even the point --
14 going from .4 to .5, tell me -- explain to me
15 exactly why that happened, because this is the year
16 you have to make the projection and it is going to
17 make a difference in your fees.

18 A. Part of the historical growth rate of 0.4
19 percent is impacted by a change in our accounting
20 system of how we account for customers when we
21 converted to the new billing system, and so we had
22 a redefinition in the number of customers which
23 results in that growth rate being somewhat
24 understated compared to -- if you were to look at
25 each of the individual years, you would see a

1 stronger growth than 0.4 percent.

2 Q. Does having more customers projected for
3 2008, does that result in cheaper per-person fees
4 or higher per-person fees on the system?

5 A. I can't answer that question. I don't do
6 the revenue requirements in the rate design.

7 Q. And then the second question is on retail
8 sales on page 5. Retail sales are expected to
9 double their rate of growth in 2008 compared to
10 2006. How does this affect the amount of money
11 Xcel is requesting? I'll read from page 5, I
12 believe. Total electrical retail sales are
13 expected to increase 2.5 percent during the 2008
14 test year compared to weather normalized 2006
15 electric sales, which had a 1.2 percent average
16 annual rate of growth. So you're expecting double
17 the rate of growth for retail sales in 2008
18 compared to 2006?

19 A. No. We're expecting that 2008 sales will
20 be 2.5 percent higher than 2006 sales, or average
21 1.2 percent growth per year, so that would be 1.2
22 percent in 2007 and then another 1.2 percent in
23 2008.

24 Q. I know, but that's doubling the rate of
25 growth. It's a 1.2 percent annual average rate of

1 growth and you're doubling it to 2.5 percent in
2 2008 test year.

3 A. Over two years. 2.5 percent is calculated
4 over two years.

5 Q. It still says residential sales are
6 predicted to increase 4.6 percent in 2008 test year
7 from 2006 sales, a 2.3 percent annual average rate,
8 and it has been in the past. I thought it says a
9 1.2 percent annual average rate of growth. It says
10 this seems strong. Even your testimony says, "This
11 seems strong relative to the historical average
12 growth rate." So can you answer the question, how
13 does this affect the amount of money Xcel is
14 requesting?

15 A. In general, higher sales will result in us
16 needing a higher revenue requirement.

17 COMMISSIONER WEFALD: Okay. Thank you.
18 That's all my questions.

19 JUDGE WAHL: Any further questions from
20 the Commissioners? Commissioner Clark.

21 **EXAMINATION**

22 **BY COMMISSIONER CLARK:**

23 Q. Just following up on that, if you could
24 delve a little bit more into what is the reason
25 that the growth is stronger. I thought maybe all

1 these CFL bulbs and efficiencies that we're pushing
2 would cut back on it. Why is growth accelerating
3 in the test year?

4 A. We've seen -- as you can see in my
5 testimony on that same page, page 5, lines 20
6 through 22, we actually just saw a weakening in the
7 residential space heating class for several years.
8 However, the sales in that class have returned to
9 levels of growth that we saw prior to that time and
10 so we're just predicting in the forecast high
11 period a return to a longer term -- well, the
12 earlier year's level of growth rate.

13 Q. Is that a result of the skyrocketing cost
14 of natural gas?

15 A. I haven't done an analysis to know if
16 that's the result.

17 Q. Okay. Could you compare North Dakota's
18 growth, both historic and projected, with that in
19 the Minnesota jurisdiction, and South Dakota and
20 Wisconsin, for that matter?

21 A. I don't have those figures right available
22 to me. I can give you some general numbers off the
23 top of my head for the NSP-Minnesota system --

24 Q. Sure.

25 A. -- if you would like those numbers. The

1 sales in the residential class for NSP-Minnesota
2 company as a whole, residential tend to run between
3 1 and a half and 2 percent growth per year. That's
4 a long-term, a 10-year growth rate, I believe. I
5 believe in the last several years they've been
6 slightly weaker than that.

7 Q. So projected, what are you projecting for
8 Minnesota?

9 A. I believe around 1 and a half percent, but
10 that would have to be subject to verification.

11 Q. So North Dakota is projected -- even given
12 the TIA law that is referenced in the testimony,
13 they have a higher growth than Minnesota?

14 A. Yes. According to these numbers that I've
15 presented here, yes, that's true.

16 Q. Does that seem odd? Our weather isn't
17 that much different than Minnesota's. Minot is
18 warmer.

19 A. Well, first of all, the forecast assumes
20 that weather will be normal --

21 Q. Right.

22 A. -- in the forecast time period and these
23 are comparing to historical sales that happened
24 weather normalized, also.

25 Q. Well, what would -- what would be

1 happening in Xcel's service territory in North
2 Dakota to give it a greater growth rate for your
3 test year than is projected in Minnesota,
4 especially given the growth that's taking place in
5 the Twin Cities metro area?

6 A. I haven't looked at the numbers
7 specifically in that manner to know for sure what
8 the answer is. The forecast reflects the
9 historical relationship between some economic
10 indicators and the sales that have occurred in
11 North Dakota, so we've defined the historical
12 relationship and then we project it into the future
13 and we look at the growth rates and determine do
14 they seem reasonable compared to multiple years of
15 various growth rates.

16 Q. But if you're taking into consideration
17 the historical growth rates, wouldn't it argue that
18 Minnesota would have a higher growth rate in the
19 future as opposed to North Dakota being that
20 historically they have higher growth rates?

21 A. I haven't looked at the data that way to
22 answer those questions specifically. I feel like
23 I'm speculating and I don't think that's the right
24 thing to be doing right here.

25 Q. Are you going to be the best witness to

1 answer these questions, or is there going to be
2 someone else who could do that?

3 A. I believe I would be the best witness to
4 answer these questions. I just do not have the
5 information in front of me right now.

6 Q. Would you be able to file a late-filed
7 exhibit that would shed some more light on why it
8 is that North Dakota is projected to grow its load
9 given all the constraints that have been listed by
10 Xcel in its ability to grow in North Dakota than
11 you project to grow in Minnesota?

12 A. I have no objections to filing an exhibit
13 like that.

14 COMMISSIONER CLARK: Okay. Thank you.

15 JUDGE WAHL: For the record, counsel, that
16 will be Xcel's late-filed Exhibit 26, which I
17 understand to be a discussion or an explanation of
18 the determination of the respective growth in --
19 growth of increased use of electrical energy in
20 North Dakota as compared to Minnesota.

21 Commissioner Clark, is that a fair statement?

22 COMMISSIONER CLARK: That's accurate.

23 JUDGE WAHL: All right. Any further
24 questions? Commissioner Wefald.

25 COMMISSIONER WEFALD: I need a little

1 help. But I would like to have a late-filed
2 exhibit filed, too. I would like to know the
3 dollar impact in the rate case if you have retail
4 sales at the NSP projected growth rate versus if
5 you used the numbers that are represented in the
6 historical trend.

7 MS. HERTZLER: We have no objection to
8 providing that exhibit.

9 JUDGE WAHL: All right. For the record,
10 it will be Exhibit 27. I'm sorry, Commissioner, I
11 was working on a description for my notes for the
12 last exhibit. Would you state what it is -- what
13 the exhibit is to show, please.

14 COMMISSIONER WEFALD: I would like to have
15 it read back from the record.

16 JUDGE WAHL: Madam reporter.

17 (Record read as requested.)

18 COMMISSIONER WEFALD: And if my advisory
19 staff has any suggestions on how to improve the
20 wording of that request.

21 COMMISSIONER CLARK: It's explanatory.

22 JUDGE WAHL: The point is, does NSP
23 understand? And if that's the case, fine. And in
24 any event, then I suggest NSP work with
25 Commissioner Wefald and staff and maybe advisory

1 staff to get what is requested. Exhibit 27 for the
2 record.

3 MS. HERTZLER: Your Honor, we believe we
4 have a good working understanding of what the
5 Commissioner is looking for -- at least I think we
6 do, but we will certainly consult with advisory
7 staff to make sure that we can confirm that.

8 JUDGE WAHL: All right. Any further
9 questions from the Commission? Followup, Ms.
10 Hertzler?

11 MS. HERTZLER: No, Your Honor.

12 JUDGE WAHL: Followup, Mr. Bahr?

13 MR. BAHR: No, Your Honor.

14 JUDGE WAHL: All right. Thank you very
15 much, Ms. Marks. You may simply hang up the phone.

16 THE WITNESS: Okay. Thank you.

17 JUDGE WAHL: We are so close to noon that
18 we should recess and we will resume at one o'clock,
19 sharp.

20 (Recess taken at 11:57 a.m. to 1:01 p.m.)

21 JUDGE WAHL: All right. Let's be in
22 order. Let me ask, first, although there doesn't
23 appear to be, whether there is anyone present this
24 afternoon other than those who will testify on
25 behalf of Northern States Power or the Commission's

1 advocacy staff who have come to the hearing to
2 offer any information or comment concerning
3 Northern States Power's electric rate increase
4 application?

5 I also wish to note for the record that,
6 in addition to Mike Diller, the Commission's
7 director of accounting, Patrick Fahn, its public
8 utility analyst, will also participate for the
9 hearing of this matter. All right. Ms. Hertzler.

10 MS. HERTZLER: Thank you, Your Honor. Our
11 next witness is Marvin McDaniel.

12 JUDGE WAHL: Mr. McDaniel, this is Al Wahl
13 at the North Dakota Public Service Commission
14 hearing room. You have been called to testify as a
15 witness. As you may be aware, your testimony is
16 required to be under oath and I'm required by law
17 to advise you regarding perjury before
18 administering the oath. Perjury is a false
19 statement of material fact which you do not believe
20 to be true; in other words, generally speaking, a
21 lie. In North Dakota perjury is a Class C felony,
22 punishable by a fine up to \$5,000, imprisonment for
23 a period of up to five years, or both.

24 **MARVIN E. MCDANIEL,**
25 being first duly sworn, was examined and testified

1 as follows:

2 JUDGE WAHL: Ms. Hertzler.

3 MS. HERTZLER: Thank you, Your Honor.

4 **DIRECT EXAMINATION**

5 **BY MS. HERTZLER:**

6 Q. Mr. McDaniel, if you would please state
7 your name and title for the record.

8 A. My name is Marvin E. McDaniel and I'm the
9 vice president of human resources at Xcel Energy.

10 Q. And, Mr. McDaniel, did you submit
11 testimony in this proceeding?

12 A. I did.

13 Q. Do you have any corrections, additions or
14 edits to that testimony?

15 A. No, I have not.

16 MS. HERTZLER: Your Honor, at this time I
17 would like to move what has been marked Exhibit 9,
18 which is the direct testimony of Marvin McDaniel.

19 JUDGE WAHL: Mr. Bahr?

20 MR. BAHR: No objection.

21 JUDGE WAHL: Exhibit 9 is received.

22 MS. HERTZLER: Mr. McDaniel is available
23 for questions.

24 JUDGE WAHL: Mr. Bahr?

25 MR. BAHR: Advocacy staff have no

1 questions for this witness.

2 JUDGE WAHL: Commissioners?

3 COMMISSIONER WEFALD: I have one.

4 JUDGE WAHL: Commissioner Wefald.

5 **EXAMINATION**

6 **BY COMMISSIONER WEFALD:**

7 Q. Mr. McDaniel, on page 2 of your direct
8 testimony, I see that NSP is not seeking recovery
9 of any long-term incentives -- and that's on lines
10 16 and 17 -- paid to our executives, but it does go
11 on to say, "or incentive compensation amounts
12 greater than 25 percent of an individual employee's
13 salary." Those 25 percent, I believe, are what are
14 called short -- considered short-term incentives
15 for individual employee's salaries, including
16 executives. What I'm wondering about is, is it
17 appropriate -- or why is it appropriate for
18 ratepayers rather than shareholders to compensate
19 for 25 percent bonuses for senior executives? For
20 example, let's say a -- let's say Mr. Kelly, you
21 know, who's the CEO of, I believe -- is he CEO of
22 Northern States Power?

23 COMMISSIONER CRAMER: Xcel.

24 Q. (COMMISSIONER WEFALD CONTINUING) Xcel.

25 All right. So let's say we have -- let's say we

1 have not Mr. Kelly, but a senior executive of NSP.
2 Is it still appropriate for ratepayers rather than
3 shareholders to compensate for 25 percent bonuses
4 for these folks?

5 A. Yes, I believe that it is.

6 Q. And why?

7 A. The purpose of an incentive program even
8 at the higher management or executive level is to
9 focus our employees with customer service, safety
10 reliability, cost reductions and related matters to
11 running a utility, and although our executives are
12 more highly compensated than our normal staff
13 member, they still have those same goals in mind.
14 And a long-term or an incentive program still
15 motivates the correct behavior we believe of
16 employees to achieve those goals.

17 Q. Well, what is the highest bonus then that
18 was paid on a yearly basis to a -- what would be
19 the highest number, the dollar amount, that goes
20 with the 25 percent for an individual employee's
21 salary from -- to an NSP executive?

22 A. I don't have that at my fingertips. The
23 total amount that was allocated to North Dakota was
24 \$680,000. On an individual basis I could get you
25 that number for the test period year 2007, but I

1 don't know it off the top of my head.

2 COMMISSIONER WEFALD: All right. Thank
3 you. I would like that.

4 JUDGE WAHL: Oh, all right. Counsel, this
5 will be late-filed -- for the record, late-filed
6 Exhibit 30 will be Xcel's -- Xcel Energy's exhibit.

7 MS. HERTZLER: Just a point of
8 clarification. What the Commissioner is looking
9 for is the largest amount of incentive compensation
10 paid to --

11 COMMISSIONER WEFALD: To one employee.

12 MS. HERTZLER: To one employee. And that
13 being with the 25 percent cap?

14 COMMISSIONER WEFALD: Yes.

15 MS. HERTZLER: We have no objection, Your
16 Honor.

17 COMMISSIONER WEFALD: I just don't know
18 what the range of salaries is. If it's a million-
19 dollar salary, then that could be up to \$250,000
20 paid as a bonus, and I just have to think through
21 whether I think that's appropriate.

22 MS. HERTZLER: Is the Commissioner also
23 looking for what the allocation would be in this
24 case? You're looking for the largest amount that
25 was paid for an incentive and then what the

1 allocation would be for this case?

2 COMMISSIONER WEFALD: Yes.

3 THE WITNESS: I could give you a general
4 range on that. The largest salary -- base salary
5 at Xcel is our CEO, Dick Kelly. This is in our
6 publicly filed proxy. It's right at \$1 million.
7 25 percent would be 250,000. And with North Dakota
8 being 5 percent, it would be approximately \$12,000
9 that would go to North Dakota.

10 COMMISSIONER WEFALD: Thank you.

11 JUDGE WAHL: Does that satisfy your
12 request, or do you also wish to have that as an
13 exhibit, Commissioner?

14 COMMISSIONER WEFALD: I think it would be
15 helpful to have that as an exhibit, as well.

16 JUDGE WAHL: All right. So the request
17 stands. It would be Exhibit 30. Any further
18 questions, Commissioner Wefald?

19 COMMISSIONER WEFALD: No. Thank you.

20 JUDGE WAHL: Any further questions from
21 the Commission? Commissioner Clark.

22 **EXAMINATION**

23 **BY COMMISSIONER CLARK:**

24 Q. Mr. McDaniel, would you be the witness to
25 ask about whether Xcel employees in North Dakota

1 receive a discount on utility services that they
2 purchase?

3 A. Yes, I could answer that question.

4 Q. Do they?

5 A. No. No, they do not.

6 Q. So it's not provided for anywhere in the
7 Xcel tariff that Xcel employees receive any sort of
8 discounted service, things like that?

9 A. No, sir. In none of the jurisdictions of
10 Xcel do we offer any of our employees a discount on
11 services.

12 COMMISSIONER CLARK: Okay. Thank you.

13 JUDGE WAHL: Any further questions from
14 the Commission?

15 COMMISSIONER CRAMER: I have none.

16 JUDGE WAHL: Counsel, listen, I stand
17 corrected. I'm sorry. The Xcel Energy exhibit
18 with regard to the bonus is not 30. It is 28.
19 Exhibit 28. All right. Follow up, Ms. Hertzler?

20 MS. HERTZLER: Yes, Your Honor.

21 **REDIRECT EXAMINATION**

22 **BY MS. HERTZLER:**

23 Q. Mr. McDaniel, is any employee paid
24 incentive compensation if they do not achieve the
25 goals related to safety and the other areas that

1 you identified?

2 A. No, they are not.

3 Q. So for an employee to receive incentive
4 compensation, they would have to achieve these
5 goals?

6 A. Yes. There are thresholds or performance
7 indicators set for these items that I mentioned
8 such as customer service and safety and reliability
9 and environmental goals. In order for the
10 incentive to be attained, then the behavior has to
11 align with that, the goal has to achieve, and if it
12 is and the threshold is met, then the incentive
13 would pay.

14 Q. Thank you. Mr. McDaniel, without the
15 payment of incentive compensation, would the
16 compensation paid to employees be competitive in
17 the market?

18 A. No, it would not. We would be
19 substantially under market compensation without our
20 incentive plan. The annual incentive plan that we
21 have makes up for the gap that exists between if
22 you compare what we'll call total cash compensation
23 or the take-home pay of our employees on an annual
24 basis and just their base salary. With that little
25 additional piece of annual incentive, although it

1 may not seem like much, they won't be allowed to
2 attain what we call market compensation for that
3 position and we, of course, wouldn't be able to
4 attract and retain our employees.

5 MS. HERTZLER: Thank you, Mr. McDaniel. I
6 have nothing further, Your Honor.

7 JUDGE WAHL: Mr. Bahr, followup?

8 MR. BAHR: No questions.

9 JUDGE WAHL: Any further questions from
10 the Commission? All right. Thank you very much,
11 Mr. McDaniel. You may simply hang up the phone.

12 THE WITNESS: Thank you.

13 JUDGE WAHL: Ms. Hertzler.

14 MR. BRADLEY: Your Honor --

15 JUDGE WAHL: I'm sorry. Mr. Bradley. How
16 could I overlook you?

17 MR. BRADLEY: I've been pretty quiet up to
18 now, Your Honor. At this time Xcel Energy would
19 like to call to the stand Elizabeth Engelking.

20 JUDGE WAHL: Ms. Engelking, as you have
21 heard me advise previous witnesses, your testimony
22 is required to be under oath and I'm required by
23 law to advise you regarding perjury before
24 administering the oath. Perjury is a false
25 statement of material fact which you do not believe

1 to be true; in other words, generally speaking, a
2 lie. In North Dakota perjury is a Class C felony,
3 punishable by a fine up to \$5,000, imprisonment for
4 a period of up to five years, or both.

5 **ELIZABETH M. ENGELKING,**
6 being first duly sworn, was examined and testified
7 as follows:

8 JUDGE WAHL: Mr. Bradley.

9 MR. BRADLEY: Thank you, Your Honor.

10 **DIRECT EXAMINATION**

11 **BY MR. BRADLEY:**

12 Q. Ms. Engelking, would you please state for
13 the record your name and your title?

14 A. My name is Elizabeth M. Engelking and I am
15 manager of resource planning and bidding for Xcel
16 Energy.

17 Q. Ms. Engelking, did you prepare testimony
18 in this proceeding?

19 A. Yes, I did.

20 Q. And was that rebuttal testimony and
21 schedule?

22 A. Yes.

23 Q. We've had that marked as Schedule 10. Ms.
24 Engelking, do you have any additions, corrections
25 or deletions to Schedule 10?

1 operating without the environmental upgrades?

2 MR. BRADLEY: Did you mean Colorado or in
3 Minnesota?

4 MR. BAHR: I'm talking about the Colorado
5 still.

6 THE WITNESS: If --

7 Q. (MR. BAHR CONTINUING) If the Colorado
8 legislation had not passed, would those plants have
9 continued operating without the upgrades for
10 another year?

11 MR. BRADLEY: I'm sorry, Your Honor.
12 Which plants is he talking about? I'm confused.
13 The Minnesota plants?

14 MR. BAHR: No. We're talking about the
15 Colorado MERP and the plants that were covered in
16 that. Sorry if that wasn't clear.

17 THE WITNESS: I can't testify to the
18 operating characteristics or the need to replace
19 those Colorado plants. I'm familiar with the
20 legislation and how we used it in Minnesota to
21 pattern the same type of recovery mechanism, but I
22 can't testify as to how our Colorado system would
23 have operated.

24 Q. (MR. BAHR CONTINUING) Is there anyone
25 that's here who will be testifying that are

1 knowledgeable about that?

2 A. No, I don't believe so.

3 JUDGE WAHL: Ms. Engelking, you can be
4 more comfortable, I think. You really don't need
5 to lean forward. You can bend that microphone or
6 move forward, either way, and then I'll kind of
7 watch. I'm able to adjust it here. I'd rather
8 have you more comfortable.

9 THE WITNESS: I'm fine.

10 JUDGE WAHL: Okay.

11 Q. (MR. BAHR CONTINUING) With regard to the
12 Minnesota MERP legislation, would the plants
13 involved in that -- the three plants -- have
14 continued operating without the changes absent that
15 legislation?

16 A. No, the plants would not have continued
17 operating. Those plants were at or near the end of
18 their life and we began seeking solutions as early
19 as 1999 for their refurbishment or their
20 replacement. I think, as Mr. Larson testified, the
21 MERP legislation was one mechanism to obtain
22 recovery for those refurbishments, but we were
23 planning for those refurbishments even before that
24 legislation was contemplated.

25 Q. So is it your testimony that they would

1 have been refurbished at the same time schedule
2 irrespective of MERP?

3 A. Yes.

4 Q. Does the power to serve Minot come from
5 the Coal Creek Station in North Dakota under a
6 power exchange agreement with Great River Energy?

7 A. We do have a power exchange agreement with
8 Great River Energy. Electrically, obviously the
9 power from Stanton station goes where it wants to
10 go. The power exchange agreement between Stanton
11 and Sherco enables us to serve our system, enables
12 Great River Energy to serve their system in a
13 fashion that avoided building direct transmission
14 lines in order to move power back and forth between
15 the systems.

16 Q. So I'm understanding, are you basically
17 saying we don't know where the power comes from
18 because it all goes in a pool and comes out and we
19 really don't know where it comes from?

20 A. Essentially the electric system is one
21 large interconnected system. The electricity goes
22 on and it follows the path of least resistance and
23 people take electricity off and we do a lot of
24 balancing on the margins to make sure everybody's
25 put in what their customers have taken off. So

1 essentially that's true. I mean, for accounting
2 purposes, we purchase a portion of -- or we
3 exchange a portion of our Sherco facility for a
4 portion of the Stanton facility and that has
5 enabled us to avoid constructing expensive
6 transmission lines that MAPP would require in order
7 for us to designate certain resources as serving
8 certain loads.

9 Q. Can you tell me how the customers in
10 Minot, North Dakota, benefit directly from the
11 emissions reductions in Minneapolis?

12 A. They benefit from the fact that we were
13 able to increase capacity at very low costs at
14 those sites. Now, we certainly achieved emission
15 reductions at those sites, but we also achieved a
16 number of other benefits that far exceeded the
17 costs of building new sources of supply for the
18 customers of Minot.

19 Q. If Xcel's North Dakota service territory
20 was served by another affiliate, say Southwestern
21 Public Service Company of North Dakota or
22 something, would NSP expect the company's customers
23 to pay for the Minnesota MERP costs?

24 A. I think you're asking for a conclusion
25 that I'm not really qualified to make. Right now

1 NSP is comprised -- has actually two separate
2 operating companies, the Minnesota company and the
3 Wisconsin company, which we operate on an
4 integrated basis. Because the Minnesota company
5 and the Wisconsin company are separate, we actually
6 have a federal order that discusses how the costs
7 of that system were separated. So if North Dakota
8 were served by a separate company and we wanted to
9 continue to do that as an integrated system, we
10 would likely obtain the same type of federal order
11 to allow us to allocate the costs between those
12 separate operating companies.

13 Q. Are you familiar with the Denver Business
14 Journal at all?

15 A. Moderately.

16 Q. Okay. Would you have ever seen the
17 article on Wednesday, April 30th of 2008, entitled
18 Opposition Voiced to Xcel's Future Power Plant?

19 A. Mr. Diller provided me with that article
20 this morning.

21 Q. So you have had the opportunity to review
22 that?

23 A. Yes, I have.

24 Q. According to that article, Xcel wants to
25 shut down at least two coal-fired plants in

1 Colorado known as the Arapahoe and Cameo plants and
2 replace them with natural gas-fired plants. Is
3 that your understanding?

4 A. Yes.

5 Q. Now, according to the same article, the
6 Colorado Office of Consumer Counsel, Director Jim
7 Greenwood, wanted to wait several years before
8 shutting down the larger Arapahoe coal-fired plant
9 to allow everyone a chance to see what happens with
10 natural gas prices. Do you recall that in the
11 article?

12 A. Yes.

13 Q. And did the public utilities staff agree
14 with that?

15 A. That case is actually in hearings as we
16 speak. Hearings started today. Once again, when
17 this is -- this is a case that is before a
18 regulatory body. We've put our facts into the
19 proceeding. Other parties such as the Office of
20 Consumer Counsel have put their facts into the
21 proceeding. Those facts will be developed and
22 ultimately the Commission will make a decision. We
23 happen to believe based on our analysis in Colorado
24 that our facts will prevail and that the closing of
25 that plant is appropriate at this time, but it is

1 in hearings and it is subject to the decision of a
2 different regulatory jurisdiction.

3 Q. So it was opposed by staff? That's one of
4 the issues in the hearing?

5 A. The article accurately reflects staff's
6 position in the case.

7 Q. So with regard to that project now, it's
8 all subject to the hearing? There's no
9 determination of how you're going to proceed?

10 A. Yes, it's in hearings and it is looking
11 for -- we're looking for Commission approval of our
12 proposal.

13 Q. Do you know the dates when the Arapahoe
14 and the Cameo facilities were originally built?

15 A. No, I'm sorry, I don't.

16 Q. How many of the Denver coal-burning MERP
17 stations have been converted to natural gas?

18 A. I'm sorry, I don't know.

19 Q. I'm going to discuss natural gas prices a
20 minute. When deciding to convert High Bridge to a
21 natural gas plant, in information in response to
22 information request 3-25, NSP indicated that it
23 assumed the cost of gas at 4.668 per MMBTU. I
24 believe I asked this of Mr. Larson, too. Do you
25 recall that?

1 A. Yes.

2 Q. And what was the source of information
3 used to determine that price?

4 A. We use a blend of a number of national
5 forecasting groups, including PIRA, CERA, and CERA
6 is C-E-R-A, and EIA, in order to come up with our
7 gas forecasts.

8 Q. So are those the three, or are there other
9 ones you also use?

10 A. Those are the three that we use currently.
11 I'm not entirely certain that those were the three
12 that we were using in 2003.

13 Q. Is there one that is primarily relied on
14 or is more heavily weighted?

15 A. For a while we used PIRA almost
16 exclusively, but we moved to a blend because we
17 wanted to get the weighting of different agencies
18 as we looked through it.

19 Q. I'm not familiar with PIRA. Can you tell
20 me what that is?

21 A. PIRA is a national consulting group that
22 puts together forecasts on a number of things. We
23 largely use them to get our forecasts on fuel
24 prices. I can't give you a lot of specifics of
25 what they do. I would have to ask our forecasting

1 people.

2 Q. Do you find that the three entities that
3 you use differ significantly in what they forecast?

4 A. They don't differ significantly. They
5 sometimes vary a little bit on assumptions or on
6 escalations, but we don't really see large
7 differences between them.

8 Q. Would you agree that coal is the most
9 abundant and available energy source within North
10 Dakota?

11 A. Yes.

12 Q. Within the United States?

13 A. Based on what I've read, I would say that
14 coal is abundant.

15 Q. With regard to the price of coal, would
16 you agree that it has remained relatively constant
17 over the years?

18 A. I would not agree with that. The price of
19 coal has actually increased quite a bit, and I
20 have -- actually, for example, at our Sherco
21 facility, in 2003 our delivered coal was \$16 a ton,
22 and in the most recent, 2007, that actually
23 increased to \$26 a ton, and so you can see that the
24 price is increasing. Now, a good portion of that
25 price increase is the cost of delivery, is the

1 transportation cost, but certainly the commodity
2 cost of coal is also increasing and we're finding
3 that in our history.

4 Q. In that significant -- or that increase,
5 was that fairly recent? Was it pretty constant
6 before that?

7 A. It's actually been going up significantly
8 over the past five years. Every year we've seen
9 increases.

10 Q. Now, we were talking about the price of
11 coal. The increase, would that be on an MMBTU
12 basis or just kind of the hard cost?

13 A. Yes, the increase was on an MMBTU basis.

14 Q. The price of coal, is that by the ton? Do
15 you know how that is purchased?

16 A. Right now I'm actually not remembering if
17 my numbers are by ton or by MMBTU. I actually have
18 that information in my briefcase if you would like
19 me to check, but I didn't bring it up to the stand
20 with me.

21 Q. Okay.

22 A. But it is overall greater than a 50
23 percent increase in our delivered coal prices from
24 Sherco from 2003 to 2007.

25 Q. According to the Oil and Gas Journal 2005

1 data, North America has about 4 percent of the
2 world's natural gas reserves. Would you have any
3 reason to disagree with those figures?

4 A. I'll accept them.

5 Q. According to the EIA, which you know what
6 I'm referring to by EIA, I believe you referenced
7 them earlier, the United States alone consumes
8 about 25 percent of the world's natural gas supply.
9 Do you have any reason to dispute those figures?

10 A. I can accept that, as well.

11 Q. Can you tell me generally how the price of
12 natural gas has fluctuated over the past 20 years?

13 A. Generally the price of natural gas has
14 gone up and down since it was deregulated in the
15 late '80s. It has had time periods where it has
16 been and remained at a fairly low level, around 2
17 to \$3 an MMBTU. It has increased, increased in the
18 early 2000s to some prices higher than that,
19 dropped back in the 2004-2005 time frame, and
20 certainly lately we have seen higher escalations in
21 the price of natural gas.

22 Q. I'm going to reference some testimony
23 given by a Daniel Klein to this Commission in Otter
24 Tail's and MDU's Big Stone II advance determination
25 of prudence case, and you probably didn't hear that

1 testimony or anything, but I want to see if you
2 have any reason to disagree with it. He had
3 determined that natural gas prices on a therm basis
4 have remained relatively constant from 1990 through
5 2000, staying around the 2 or \$3 an MMBTU.
6 However, beginning in 2001, they fluctuated between
7 4 and \$12 an MMBTU. Do you have any reason to
8 dispute his testimony?

9 A. No. That agrees with what I just
10 testified to.

11 Q. Did Mr. Diller share an article with you
12 from China Daily?

13 A. Yes.

14 Q. Did you have the chance to review that?

15 A. Yes, I did.

16 Q. That expresses, I guess, concern regarding
17 the lack of natural gas?

18 A. It expresses concern with China's natural
19 gas supply, which really has very little relevance
20 to the availability of natural gas in North
21 America. There are a number of reasons why China's
22 gas supply could be constrained. It could be
23 because they're not locating supplies. It could be
24 because they haven't built sufficient
25 infrastructure. The article is not very definitive

1 on that issue. The article does express concern
2 with China's natural gas supply, however.

3 Q. And you apparently would not agree that
4 there's a concern with that from the United States'
5 perspective?

6 A. I don't agree that there's a concern with
7 that from the United States' perspective.

8 Q. I believe earlier I asked Mr. Larson
9 regarding the High Bridge plant and that being kind
10 of the most current in technology for a gas turbine
11 technology. I believe his response was yes. Do
12 you recall that?

13 A. Yes, it is.

14 Q. And I followed up and I believe he said
15 that you would be the best one to ask these
16 questions about the energy efficiency rating of the
17 High Bridge plant. Do you know what that is?

18 A. In general. And I can't speak
19 specifically to the High Bridge plant in terms of
20 efficiency, but in general combined-cycle plants
21 offer conversion efficiencies between about 50
22 percent and 60 percent from -- as compared to other
23 resources that might offer a lower conversion
24 efficiency because they have the advantage of the
25 dual cycle.

1 Q. I believe the response to the staff data
2 request 3-27 indicated 46 percent. Do you believe
3 that?

4 A. Yes, I would believe that.

5 Q. Now, the efficiency rating is increased or
6 decreased depending on how it is used; would you
7 agree with that?

8 A. I don't understand what you mean by "how
9 it is used."

10 Q. Well, for example, if it's -- if a
11 facility is used for peak so it's kicking in and
12 turning on and turning off, so to speak, is the
13 efficiency rating less than if it's maintained at a
14 load level?

15 A. There may be minor changes in efficiency
16 depending on the amount of time you run it. I
17 think if you're running it as a combined cycle,
18 you're running the peaking and the heat recovery
19 steam generator in concert with each other, you
20 will obtain efficiencies around the level of your
21 maximum efficiency. Now, should you choose to
22 simply operate the combustion turbine, then you
23 will only receive the efficiency of the combustion
24 turbine, and that is something that you may do in
25 peak times, but you would do that because it's more

1 economic for you to fire up the combustion turbine
2 and run it for a little bit even with the lower
3 efficiencies than it would be to fire up the entire
4 combined cycle and operate it for a longer period
5 of time.

6 Q. So the anticipation is about 46 percent
7 efficiency?

8 A. Yes.

9 Q. Now, this has been confusing to me, and I
10 don't know about anyone else. Mr. Larson kept
11 referring to peak plants and it seems like -- I
12 understand what a peak plant is, I understand what
13 a base load plant is, but what does an intermediate
14 plant do?

15 A. An intermediate plant is a plant that you
16 would expect to be on line when your peak loads
17 are, and sometimes if we buy a contract that we say
18 is an intermediate contract, we refer to it as a
19 5-by-16 contract, meaning we're purchasing it five
20 days a week for 16 hours a day, usually between the
21 hours of about 7 a.m. and 11 p.m. These are kind
22 of important plants because that's a time when your
23 load is higher than it might be in the off-peak
24 times, but is maybe not at its very highest use
25 like you might see on a hot day in July. So an

1 intermediate plant we expect to run about 50
2 percent of the time usually on our on-peak hours.

3 Q. And High Bridge is intermediate?

4 A. Yes, High Bridge is intermediate.

5 Q. How many other intermediate generating
6 plants do you have?

7 A. We have purchase contracts with LS Power,
8 which operates occasionally as an intermediate
9 plant, and with Calpine Mankato, which also
10 operates as an intermediate plant.

11 Q. Do you have any -- you mentioned purchased
12 power, but does NSP have any intermediate plants?

13 A. We have a combined-cycle plant, an
14 intermediate plant at Black Dog, and Riverside will
15 also be an intermediate plant once it's converted.

16 Q. Now, what has caused the need for new
17 intermediate plants when you've been fine without
18 anything but Black Dog in the past?

19 A. Part of -- part of what causes a need has
20 to do with economics. Combined-cycle is -- it's a
21 relatively recent development in generation. I
22 don't think we really started seeing a lot of them
23 until the '90s, when we really started seeing the
24 use of combined-cycle and cogeneration. Before
25 that electric utilities really only had two choices

1 to serve their system needs, a base load plant,
2 which you would hope to run about 85 percent of the
3 time, and a peaking plant, which you would hope to
4 run maybe 10 percent or less of the time, and there
5 wasn't really any economic options to fill a need
6 that was in between that 85 percent of the time,
7 and so what utilities would do is they built base
8 load plants and then they would just not operate
9 them for, you know, some period of time. And, in
10 fact, our High Bridge plant and our Riverside plant
11 for the last 15 years have operated at capacity
12 factors of 65 percent or less, and so in effect
13 they were coal plants that were being operated as
14 intermediate plants because we simply didn't need
15 their energy around the clock. Natural gas
16 combined-cycle offers an economic alternative to
17 building a base load plant and then not operating
18 it at its full capacity factor. And so as those
19 plants have become more available and as
20 opportunities on our system have become available,
21 when those are economic, we would choose to
22 implement those rather than some other type of
23 energy option.

24 Q. Okay. The plants that you said were kind
25 of running as intermediate plants in the past --

1 A. Yes.

2 Q. -- were they capable of running at a
3 hundred percent, or because of their age or other
4 issues would they need to run at a more
5 intermediate level?

6 A. They were capable of running at much
7 higher capacity factors, but it was not economic to
8 do that on our system.

9 Q. Because you needed an intermediate level;
10 is that why?

11 A. Because we didn't have the load to support
12 that operation.

13 Q. To meet Minnesota's renewable portfolio
14 standard, how many megawatts of wind does Xcel plan
15 to have by 2025?

16 A. We actually have calculated it to 2020,
17 which is when our Minnesota standard ramps up to
18 its full level of 30 percent of retail sales from
19 renewables, and including that standard, our North
20 Dakota objective, our South Dakota requirement or
21 objective and our Wisconsin requirement, it's a
22 total of 4,000 megawatts of wind.

23 Q. Okay. Well, according to the response to
24 data request 3-34, NSP had its system peak on July
25 26, 2007, requiring 8,804 megawatts and that of

1 that 17 megawatts was wind generated. Does that
2 sound accurate to you?

3 A. I'll accept it.

4 Q. Well, if 17 -- I guess the question is,
5 how many more nongas plants -- the wind only
6 covered 17 megawatts of this 8,800, so how many
7 more gas plants is Xcel going to need in order to
8 fill this gap to reach this 4,000 requirement by
9 2020?

10 A. To put it in perspective, that particular
11 peak was one hour of one day of one month of an
12 entire year. Now, what we expect is that we will
13 have gas that will kick in during that one hour or
14 the 25 hours or the 50 hours where we have very hot
15 days and the wind is not blowing. However, the
16 wind is actually supplying a large amount of energy
17 over the year. Now, what Xcel Energy proposes in
18 its resource plan is that it's about 2,300
19 megawatts of natural gas-fired capacity in its plan
20 in addition to what we've proposed with our base
21 load upgrades, what we've proposed to add to meet
22 our renewable standards. However -- and Mr. Larson
23 also pointed this out in his testimony -- even
24 though we expect the amount of gas capacity to
25 increase a great deal, we only expect the amount of

1 energy that we get from gas to increase by about 4
2 percent, from about 8 percent on our current system
3 to about 12 percent when we get to 2020.

4 Q. When are your peak hours typically? I
5 mean, is it summer, winter?

6 A. We are a summer-peaking utility. We
7 typically peak sometime during the month of July or
8 August.

9 Q. And during these peak hours is it typical
10 for the wind not to be blowing? Is there any
11 correlation between the peaking and the wind?

12 A. In Minnesota, North and South Dakota we
13 actually do tend to find that the wind resources
14 tend to be lower at the times that we are peaking.

15 Q. Do you know what the annual fuel
16 utilization efficiency rating means, AFUE?

17 A. No, I don't.

18 Q. That's what -- kind of the requirements
19 for residential natural gas heaters and their
20 efficiency rating. Do you have any knowledge about
21 those at all?

22 A. I understand that when I purchase a
23 furnace, I have an option of a 95 percent efficient
24 furnace or an 85 percent efficient furnace, but
25 that's kind of the extent of my knowledge of that.

1 Q. Okay. And so based upon your own
2 experience, the efficiency rating of those
3 residential are 85, 95 percent? You can go
4 purchase one at that level?

5 A. I would agree with that.

6 Q. Would you be surprised to know that the
7 minimum required for the AFUE for home gas heaters
8 is 78 percent? Would that surprise you or do you
9 have any information?

10 A. I have no knowledge of that.

11 Q. Now, according to the response to data
12 request 3-27, the High Bridge facility is expected
13 to burn 8,527 Gbtu. Does that sound correct? I
14 may have said it wrong. Gbtu. That's a big number
15 to me. What does Gbtu stand for?

16 A. I would guess it's giga Btu. Not being a
17 gas person, I haven't actually used that term, but
18 I would assume it's analogous to gigawatt-hours.

19 Q. That was my assumption, but I don't
20 profess to know that figure or terminology.
21 According to your 2007 annual report to the
22 Commission, North Dakota natural gas consumers use
23 about 67 CCF a month. So do you have any idea how
24 many North Dakota natural gas consumers could be
25 served with the gas you plan on putting into High

1 Bridge?

2 A. My attorneys told me to bring a calculator
3 to the stand. I ignored them.

4 Q. Would you disagree that a hundred
5 thousand? Would you disagree with the figure of a
6 hundred thousand, approximately?

7 MR. BRADLEY: Would you like a calculator?

8 THE WITNESS: 667 CCF per month.

9 Q. (MR. BAHR CONTINUING) 67 CCF.

10 A. 67 CCF. I would accept that's roughly
11 correct.

12 Q. And NSP serves about 38,000 residential
13 gas customers in North Dakota; correct?

14 A. I don't know how many gas customers we
15 serve in North Dakota.

16 Q. Now, this is based upon your website.
17 High Bridge generators will have a total capacity
18 of 267 megawatts and the Riverside generators will
19 have a total capacity of 373 megawatts. Is that
20 your understanding?

21 A. I believe that what you're quoting are the
22 capacity factors of the -- the capacities of the
23 existing plants. Actually, the new plants will
24 have -- the High Bridge plant has a capacity of
25 about 515 megawatts total and Riverside will be --

1 I didn't testify on that in this case and so I'm
2 operating from memory, it's about 440 megawatts
3 total.

4 Q. And is it anticipated that the Riverside
5 will be an intermediate plant?

6 A. Riverside will be a natural gas combined-
7 cycle plant similar to the High Bridge plant.

8 Q. So operating around the same level of
9 efficiency, 47 percent or so?

10 A. Yes.

11 Q. In addition for heating, are you aware of
12 any of the other larger uses for natural gas?

13 A. There are industrial process uses,
14 certainly.

15 Q. One of those would be fertilizer? Are you
16 aware of that?

17 A. Yes, I am.

18 Q. Does NSP have a current IRP that
19 incorporates existing coal technology instead of
20 future coal-based resources?

21 A. We did -- in our current resource plan, as
22 we evaluated and put our resource plan together, we
23 did evaluate current coal technology as well as the
24 coal technology that we actually placed in the plan
25 as an alternative. In reality, the cost of

1 brand-new coal-fired generation has become so
2 expensive, that our analysis did not actually pick
3 coal as an economic option in any configuration
4 that we modeled it.

5 Q. Now, in the model that you've done, it has
6 a -- I'm not exactly sure what it's called, but the
7 future technology that -- well, according to your
8 information response, your response to information
9 request 3-16, is one that is not even certain or
10 dependable and the cost of which is virtually
11 unknown. This has to do with the CO2 sequestration
12 and storage. Are you familiar with that?

13 A. Yes, I am.

14 Q. And you would agree that what costs will
15 be associated with that are unknown?

16 A. I would agree that there's a great deal of
17 variability in the cost projections right now.

18 Q. In fact, you projected possibly \$9 more or
19 \$40 more a ton?

20 A. Those costs were actually -- are estimates
21 of the costs of future carbon regulation, not the
22 cost of actual control or sequestration of carbon
23 on our plant. As we are looking forward and
24 thinking that there will most certainly be carbon
25 regulation at some time in the future, it will

1 likely be based on what we see now, some sort of a
2 cap-and-trade system, we would be looking at the
3 tradeoffs between the cost of purchasing an
4 allowance, which would be maybe the 9 to \$40 a ton
5 that we estimated, and the cost of actually
6 controlling carbon on our system with something
7 like a sequestration -- an IGCC with sequestration,
8 a fuel-switching proposal or conservation or a
9 carbon-free resource. So those costs aren't the
10 same as the costs of actually sequestering coal.

11 Q. And you don't know the cost -- what the
12 cost will be of sequestering?

13 A. We have estimates of the cost based on
14 research that's been done to date, but we would
15 stipulate that it's subject to wide variability.

16 Q. Does your IRP model include any
17 consideration of off-system sales that might be
18 made if a base load unit were built instead of
19 another intermediate peaking unit?

20 A. We have a limited ability to consider
21 off-system sales in our model and also the same
22 off-system purchases in our model. We have decided
23 as a utility that our focus is really on being a
24 core utility whose job is to construct generation
25 to serve its customers, and not whose job is to

1 construct generation to sell, for example, on the
2 wholesale market or to be a large merchant player.
3 We propose to be a regulated utility, and as such
4 we plan our system in the most economic fashion to
5 serve our customers. So as such we don't actually
6 plan to construct capacity that is not needed by
7 our customers with the hopes that we would be
8 selling it on the wholesale market.

9 Q. So when you say you have the limited
10 ability to do that, that's because of a policy
11 decision NSP has made not to do that?

12 A. Yes.

13 Q. Are you aware of any relevant economic
14 impacts that are not included in the company's IRP?

15 A. I don't know what you mean by "relevant
16 economic impacts."

17 Q. Well, I think "relevant" means things that
18 would impact the ultimate cost or decision. Are
19 there factors that you're aware of that could have
20 been considered that were not?

21 A. No. I believe we've done a fairly good
22 job analyzing the relevant economic impacts in
23 developing our resource plan.

24 Q. I believe Mr. Larson agreed and testified
25 that, as a general rule, North Dakota has better

1 wind resources. Do you agree with that?

2 A. As a rule, North Dakota has very good wind
3 resources. There are also other states.

4 Q. I meant better than Minnesota generally.

5 A. Generally, but certainly there are places
6 in Minnesota that have as good wind resources as
7 North Dakota.

8 Q. On average, what does it cost for new wind
9 generation installed in Minnesota versus North
10 Dakota?

11 A. Well, the cost of new wind resources are
12 pretty similar wherever you install them. They're
13 right now running about \$2,000 a kW installed.
14 I'll end it there.

15 Q. Do you recall a meeting with staff where
16 you indicated it was 1.5 cents cheaper to do it in
17 North Dakota than Minnesota per kilowatt-hour?

18 A. If you want to discuss it on a
19 per-kilowatt-hour basis, it's true that in places
20 where you have higher wind speeds and can achieve
21 higher capacity factors, you get more
22 kilowatt-hours out of your \$2,000 per kW of wind,
23 and because, of course, you're not paying for fuel
24 costs, you will get lower prices. The figure that
25 I provided in staff meeting was a straight-up

1 turbine-to-turbine comparison based on capacity
2 factors, did not include any of the other costs of
3 developing or implementing a project.

4 Q. According to Minnesota's Wind Integration
5 Study, WindLogics projected mean annual capacity
6 factors for the Fargo, Grand Forks and Minot areas
7 of 38 to 50 percent. I believe you probably heard
8 me express that to Mr. Larson.

9 A. Yes.

10 Q. Are you familiar with that?

11 A. Yes, I am.

12 Q. And so the average or mean, median number
13 would be 44 for those three locations. And in
14 Minnesota it's my understanding that the actual
15 achieved amount was 34.7 percent; does that sound
16 accurate -- in 2007?

17 A. There's a difference between projected and
18 achieved numbers. The projected capacity factors
19 in Minnesota are actually quite a bit higher than
20 what has actually been achieved, as well, and that
21 has to do with the differences in tub heights, that
22 tub heights are getting much taller, that
23 technology is getting better at capturing the wind.
24 For example, we now have turbines that very
25 efficiently capture wind at low wind speeds that we

1 couldn't actually do before. So, I mean, I think
2 if you want to look historically, you can say, yes,
3 historically our wind generation in Minnesota as
4 achieved in 2007, we did say 34.7 percent; but at
5 the same time our wind generation in North Dakota,
6 our Velva Wind Farm, was only 31 percent in 2007,
7 and yet we do expect in the future that we would
8 get very high capacity factors from our wind in
9 both Minnesota and North Dakota. And in fact in
10 projecting our wind to meet the resource plan,
11 we've used an overall capacity factor of 40 percent
12 as an assumption of how much wind we would have to
13 install.

14 Q. And Velva is your only site in North
15 Dakota; correct?

16 A. Yes, it is.

17 Q. So that's the only one you have anything
18 to compare to?

19 A. For actual data on NSP system, yes.

20 Q. Now, according to NREL website, and you
21 know what NREL is, it does not appear that the
22 State of Minnesota has a validated MAPP, nor is it
23 keyed to validate one -- queued to have one. Are
24 you familiar with that?

25 A. I'm not familiar with the NREL process of

1 validating wind maps. I can tell you that
2 Minnesota has one of the oldest, longest standing
3 and broadest wind resource assessment programs,
4 it's been operated by the Minnesota Department of
5 Public Service, now the Minnesota Department of
6 Commerce, Office of Energy Security, since the
7 early 1980s, and we actually do have in Minnesota
8 one of the best characterized wind resources. Now,
9 that perhaps hasn't translated to NREL's maps, but
10 certainly if you were to look at the Minnesota
11 Department of Commerce website, you would see a map
12 that looks very closely at and grades wind
13 resources. So wind resources have been assessed in
14 Minnesota, perhaps have not made it into the NREL's
15 validated system.

16 Q. So more by Minnesota, not by some national
17 group or organization?

18 A. Yes.

19 Q. Would you agree that the cost of leasing
20 land is generally lower in North Dakota than
21 Minnesota?

22 A. I have no knowledge of the cost of leasing
23 land.

24 Q. How about with regard to getting site
25 transmission facilities, do you have any knowledge

1 about any difficulties, whether it's more difficult
2 in Minnesota than North Dakota?

3 A. I'm sorry, getting what?

4 Q. To get a site transmission facility, to
5 get through any regulations or any landowner
6 disputes.

7 A. I'm not familiar with the difference
8 between siting transmission in Minnesota and in
9 North Dakota. I am familiar with the difference in
10 siting large transmission projects and small
11 transmission projects and I do know that overall
12 large transmission projects are much more difficult
13 to site, construct and complete in any jurisdiction
14 than smaller transmission projects.

15 Q. So basically you're not able to respond to
16 a question about the smaller transmission sites?

17 A. I can't respond to a question about the
18 differences in the difficulty of siting
19 transmission in North Dakota versus Minnesota.

20 Q. NSP recently had an electric rate increase
21 hearing before the Minnesota PUC; correct?

22 A. Yes.

23 Q. Do you know how many intervenors were
24 there at that proceeding?

25 A. No, I don't.

1 Q. No idea?

2 A. I can't give you a precise number.

3 Q. Were you present?

4 A. No, I was not. I was not present at that
5 proceeding.

6 Q. Are you aware of the Minnesota Climate
7 Change Advisory Group that issued its final report
8 to the Minnesota governor and legislature?

9 A. I am aware of the group.

10 Q. And your president is a member of that
11 group; correct?

12 A. Mr. Sparby is a member of that group.

13 Q. Have you read the final report?

14 A. I have not read the final report.

15 Q. That report indicates that Minnesota's
16 emissions growth was driven largely by the growth
17 of Minnesota's population and emissions associated
18 with imported electricity. I'm assuming you would
19 have no reason to dispute that report.

20 A. I can agree that that's what the report
21 says.

22 Q. You would have no information to
23 contradict the report?

24 A. I have no unique information.

25 Q. Are you aware that Otter Tail Power

1 Company and MDU filed for a determination of
2 advance prudence for their share of the proposed
3 Big Stone II coal plant?

4 A. Yes, I'm aware of that.

5 Q. Are you aware that Otter Tail Power
6 Company constructed and owns 40.5 megawatts of wind
7 capacity of the Langdon Wind Energy Center?

8 A. I'm aware that they own wind. I can't
9 give you details on the amount or the location.

10 Q. Are you aware that the Commission received
11 Otter Tail's request for a rider to recover its
12 Langdon Wind Farm cost beginning on day one of its
13 operations on February 1, 2008, and that it was
14 approved in less than four months?

15 A. No, I'm not aware of that.

16 Q. I believe the Commission's records show
17 that. According to the order in that case, Otter
18 Tail disclosed that it saved its customers 10
19 percent when building and owning the Langdon Wind
20 Farm compared to simply purchasing wind from the
21 same wind energy center. And I would assume you
22 have no reason to dispute that information.

23 A. I have no independent knowledge of that
24 information.

25 Q. I believe I asked Mr. Larson some about

1 this and I think he deferred to you. Are you aware
2 that Otter Tail Power Company reached an agreement
3 with the Minnesota Department of Commerce to offset
4 a hundred percent of its carbon dioxide emissions
5 attributable to the proposed Big Stone II coal
6 plant for electricity used by its customers in
7 Minnesota?

8 A. I know that they reached an agreement
9 prior to their refiling of the Big Stone plant in
10 new configuration. I do not know that they've
11 reached any agreement with the OES on the newly
12 configured plant.

13 Q. Has NSP with regard to any of its
14 modifications, refurbishing of its plants attempted
15 to reach any agreements with Minnesota where it
16 covers the full cost of the benefits that go to
17 Minnesota?

18 A. NSP's costs -- NSP's refurbishments and
19 repowering of the plants have all either reduced
20 carbon or have been carbon neutral, so we've had no
21 need to seek such an agreement.

22 Q. The question was, if the costs are going
23 primarily to Minnesota -- or only to Minnesota, has
24 NSP ever attempted to reach an agreement where
25 Minnesota pays the full cost?

1 MR. BRADLEY: Lack of foundation. There's
2 nothing in the record indicating that there are
3 such animals -- items. If you would identify an
4 item, we can address it specifically.

5 MR. BAHR: Mr. Bahr. The objection is
6 sustained.

7 Q. (MR. BAHR CONTINUING) As you probably
8 know, the proposed Big Stone II project in South
9 Dakota has several partners and the proposed plant
10 makes use of several facilities in common with the
11 existing Big Stone I plant. Did NSP look into
12 investing in this brownfield site?

13 A. NSP had early discussions with Otter Tail
14 Power about whether or not we were interested in
15 being a Big Stone partner. After due consideration
16 of that option versus other opportunities, we
17 decided that we would not be a Big Stone partner.

18 Q. And can you tell me the basis of that
19 decision?

20 A. We believed that there were other better
21 economic opportunities on our system.

22 Q. In NSP's rebuttal testimony it expressed
23 concern that if North Dakota doesn't pay for the
24 MERP projects and such, that North Dakota will end
25 up losing the benefits of the low-cost nuclear

1 power. Do you recall that testimony?

2 A. I don't believe that you've characterized
3 it correctly. My testimony is that if North Dakota
4 chooses not to pay the costs of the integrated
5 system, then we have no choice but to desegregate
6 the system, which could increase costs for North
7 Dakota because they would not receive the benefits
8 of certain facilities that they're choosing not to
9 pay the full costs of.

10 Q. You heard me ask Mr. Larson about what I
11 referred to as the super tax? Do you recall that?

12 A. I do recall that.

13 Q. Can you agree that that is outside the
14 bounds of a normal operating expense?

15 MR. BRADLEY: Would you please define
16 specifically what you are identifying as the super
17 tax?

18 Q. (MR. BAHR CONTINUING) The renewable
19 development fund.

20 A. I think that normal operating costs are
21 defined as the costs of doing business in the
22 places where we are doing business, and so to the
23 extent that certain costs do become costs of doing
24 business, yes, they are reasonable operating costs.
25 They're costs that are outside of our control that

1 are necessary to maintain operation of the plant,
2 and so, yes, they would be costs of doing business
3 or normal operating costs.

4 Q. When does the Grand Meadows go into
5 service?

6 A. Grand Meadow Wind Farm is expected to be
7 in service in October or November of this year.

8 Q. On pages 2 and 3 of your testimony you
9 state that your investments are cost-effective. Do
10 you agree that cost-effective investments does not
11 necessarily always benefit all consumers equally?

12 A. No, I don't agree with that. I think by
13 definition the fact that they are cost-effective
14 means that the benefits of the investments exceed
15 the costs and, therefore, all of the -- I'm
16 sorry -- therefore, all of our customers benefit.

17 MR. BAHR: I've kind of completed the
18 followup from Mr. Larson's testimony. I want to go
19 through my other stuff so I don't ask too many
20 duplicate questions. If we could have a break.

21 JUDGE WAHL: Ten minutes, Mr. Bahr?

22 MR. BAHR: Yes.

23 JUDGE WAHL: Five, ten?

24 MR. BAHR: Whatever you're willing to give
25 me.

1 JUDGE WAHL: Well, let's do it right. Ten
2 minutes. We'll be in recess until 2:20.

3 (Recess taken.)

4 JUDGE WAHL: All right. Let's be in
5 order. Mr. Bahr.

6 Q. (MR. BAHR CONTINUING) Do you recall
7 participating in a conference call with Commission
8 staff on May 6th of this year?

9 A. Yes, I do.

10 Q. Do you recall --

11 JUDGE WAHL: Is your microphone on, Mr.
12 Bahr?

13 MR. BAHR: I can reask if you want.

14 JUDGE WAHL: No. You're fine. I think we
15 probably got it.

16 Q. (MR. BAHR CONTINUING) Do you recall
17 making the statement during that call that the King
18 plant would not have been rehabilitated as soon as
19 it was absent the MERP program?

20 A. I don't recall that that's exactly what I
21 said. I do believe that my statement was taken out
22 of context in Mr. King's testimony. What I meant
23 when I discussed the rehabilitation of King was
24 that we were able to undertake the rehabilitation
25 of King on a voluntary basis and put in the

1 controls that we believed were necessary when we
2 did it. If we had -- any time that you touch the
3 boiler in a plant, then you are required to
4 follow -- and Mr. Rosvold can speak to this better
5 than I can -- you are required to implement
6 EPA-required environmental upgrades that get you to
7 best available control technology. By undertaking
8 King when we did on a voluntary basis, we were able
9 to better control the types of technologies and
10 costs that we put in instead of going in and saying
11 we have to upgrade the plant, now we've got to meet
12 these requirements. Mr. Rosvold is a much better
13 person to testify on this piece than I am, but the
14 reality is that the King plant at that point was
15 falling apart and needed to be rehabilitated.

16 Q. Now, concerning your testimony, at the
17 bottom of page 11, beginning at line 26, you state
18 that the Minnesota Pollution Control Authority was
19 charged by statute to analyze both the proposed
20 plan and the alternative for the High Bridge plant.
21 When you say "by statute," what statute are you
22 referring to?

23 A. This would be the MERP statute.

24 Q. And with regard to the MPCA, their
25 concern, would you agree, was primarily that of

1 controlling pollution?

2 A. Yes, that is their charge.

3 Q. And so they were not concerned, when they
4 were reviewing that, to minimize costs to
5 ratepayers? That's not their issue?

6 A. They analyzed that piece of the pie, the
7 cost-effectiveness of the emission controls that we
8 were proposing. However, the entire project was
9 subject to review by the Minnesota Public Utilities
10 Commission for reasonableness, including its cost
11 to ratepayers. So while the MPCA did not undertake
12 that review, the Minnesota Public Utilities
13 Commission did undertake an extensive review of the
14 cost-effectiveness of these options compared to the
15 alternatives, including the impact of the costs to
16 ratepayers.

17 Q. You discuss, starting at page 22, the
18 benefits of an integrated system. Is it your
19 understanding that staff are arguing against an
20 integrated system?

21 A. No, but I believe that staff is arguing
22 against paying the full costs of an integrated
23 system, which is largely the same thing.

24 Q. You object to a North Dakota stand-alone
25 resource mix. Where did you find in the staff

1 testimony or from witnesses that they're asking for
2 such a document?

3 A. In the direct testimony of Mr. Charles W.
4 King, on page 33, Mr. King testifies, For this
5 reason, I recommend that NSP be directed to compare
6 and file with the North Dakota PSC an integrated
7 resource plan that focuses on North Dakota
8 requirements. This plan should be based on the
9 proposition that North Dakota ratepayers pay for
10 programs and expenditures that are required by
11 North Dakota.

12 Q. So based upon that, that's what your
13 understanding was as what he was proposing was a
14 stand-alone resource mix for North Dakota?

15 A. My understanding is that he is proposing a
16 separate resource plan for North Dakota that is
17 somehow different from the integrated resource plan
18 that we do for the company as a whole.

19 MR. BAHR: No further questions.

20 JUDGE WAHL: Do the Commissioners have
21 questions?

22 COMMISSIONER WEFALD: Yes.

23 JUDGE WAHL: Commissioner Wefald.

24 **EXAMINATION**

25 **BY COMMISSIONER WEFALD:**

1 Q. My first questions relate to -- my first
2 questions relate to the Grand Meadow wind project
3 and the Southeast Minnesota transmission project.
4 It's my understanding that this is owned by NSP and
5 that it's a hundred megawatts. Is that a correct
6 understanding?

7 A. The Grand Meadow Wind Farm?

8 Q. Mm-hmm.

9 A. Yes.

10 Q. And can you remind me again when that
11 project was purchased and started operation?

12 A. The project is under development now, it's
13 under construction. We reached an agreement with
14 enXco for them to develop a build-transfer project
15 for us in 2007. It is currently under construction
16 and we expect it to be fully operational and in
17 service in October or November of 2008.

18 Q. And when did you take bids on that
19 particular project?

20 A. We took bids on that project in late 2006.

21 Q. At that time as part of your bid process,
22 did you consider the -- at that time it was owned
23 by PPM -- in north central North Dakota there's a
24 PPM site that the Commission has sited for 200 --

25 A. At Rugby.

1 Q. Near Rugby for 200 megawatts.

2 COMMISSIONER CRAMER: 150.

3 Q. (COMMISSIONER WEFALD CONTINUING) Was that
4 part of the bid process?

5 A. That was not part of the bid process
6 because the specific objective of this particular
7 project was that we would gain experience with
8 owning wind, and PPM has not been willing as of
9 right now to enter into a build-transfer type of
10 arrangement. They prefer a business model where
11 they own and operate their facilities and sell the
12 energy under contract. And so at that time we only
13 considered people who were proposing -- or
14 developers that were proposing to develop a plant
15 that we could actually purchase and own.

16 Q. At that time did you -- did you consider
17 the project that was being proposed by Florida
18 Power & Light in northeastern North Dakota?

19 A. Florida Power & Light did not offer that
20 project in to our solicitation.

21 Q. On the -- on the -- has Florida Power &
22 Light offered in to your solicitation process any
23 of its projects in North Dakota?

24 A. I can't give you specific details on the
25 500-megawatt RFP. My department --

1 Q. The one that was for the -- I'm talking
2 only about the one for the Grand Meadow wind
3 project.

4 A. No. We did not receive any North Dakota
5 offers in that particular solicitation.

6 Q. And what do you credit that to? How did
7 you even make available your information that you
8 were trying to build a wind farm, et cetera? Why
9 would that occur that there would be absolutely no
10 projects in North Dakota that would be interested
11 in bidding into this project? What were the
12 stipulations that you put out there that may have
13 said to people don't even bother to try?

14 A. I do actually understand your question
15 now, and I apologize. The Grand Meadow Wind Farm
16 was built pursuant to a particular -- a particular
17 requirement that actually is no longer in effect in
18 Minnesota law, but was in effect at the time. It
19 was an outcome of the 2003 Prairie Island dry cast
20 storage legislation that permitted Xcel Energy to
21 own and operate up to a hundred megawatts of wind
22 in the State of Minnesota. It was our opportunity
23 to get our feet wet owning wind, and we, of course,
24 believe that owning wind is the lowest possible
25 cost of actually bringing that resource to our

1 customers, so we -- that solicitation where we
2 actually looked at different projects only included
3 projects within the State of Minnesota because we
4 were following the law at the time. Now, that law
5 has since been repealed, but the project was
6 already underway at the time that the law was
7 repealed.

8 Q. Thank you. And then when you talked --
9 you mentioned that the Velva Wind Farm that's
10 located here in North Dakota, I believe it's 12
11 megawatts of energy that's in that Velva wind
12 project, the size of the turbines, how do they
13 compare to those that are sited in Minnesota?

14 A. I'm actually not sure what size turbines
15 we're using in Velva.

16 Q. I believe they're 750-kV because there's
17 18 of them, I believe, to provide 12 megawatts of
18 wind. Would there be any correlation between then
19 the size of the turbines and the capacity factors
20 of your other turbines that you have located in
21 Minnesota?

22 A. The size of the turbines, a lot of it
23 depends on the vintage of the project. So, for
24 example, some of the wind that we have on our
25 system that we installed in 1994, in 1995, the

1 earliest wind, we have 330-kW turbines. I think we
2 put in 500-kW turbines in the large Lake Benton
3 projects that we did in the '96-'97 time frame. So
4 turbines get larger as we move along. We actually
5 have a mix. I think in general what I can tell you
6 about turbines is that they keep getting bigger and
7 they keep getting more efficient, and so today I
8 think we're seeing the standard turbine that's
9 being put on our system is a one-and-a-half to two-
10 megawatt turbine. 2.1-megawatt turbine is, I
11 think, a pretty common turbine on our system. But
12 the size of turbines that are going in on the
13 system have more to do with vintage, you know, when
14 you put them in, than any choice to put a
15 particular size somewhere. I think in general the
16 larger turbines are more cost-effective and people
17 try to put larger turbines in whenever possible.

18 Q. Thank you. And then I need that little --
19 I'm not quite sure how to phrase these questions,
20 but you've implied that if North Dakota chose --
21 the North Dakota Commission chose not to endorse
22 all of the decisions that have been made regarding
23 the King plant and the High Bridge plant and the
24 mercury control project at King and Sherco and
25 Grand Meadow and Red Wing, et cetera, that it would

1 mean that North Dakota would have to be put on a
2 separate stand-alone system. Would you explain
3 that? I'm just curious about, let's say, why -- if
4 we thought that we wanted to allow less cost for
5 High Bridge plant than you have presented to us in
6 this rate case, why that would -- and let's say we
7 agreed with all of the other decisions that have
8 been made, but not the High Bridge plant decisions
9 and we thought we wanted to not allocate the full
10 cost for that, why would that mean then that North
11 Dakota needed to pay for all new generation to
12 support the North Dakota ratepayers?

13 A. Commissioner, I don't think that's what
14 I'm really saying. You know, I think my testimony
15 in this case is that the costs that we incurred at
16 High Bridge and King, certainly the costs we have
17 incurred at our 50-plus-year-old RDF facilities are
18 reasonable costs that serve the ratepayers of North
19 Dakota and are prudent for recovery. That's my
20 testimony in this case. Now, our concern in this
21 case is that if regulatory bodies start to go in
22 and sort of pick and choose the costs that they
23 want to pay for certain facilities --

24 Q. But isn't that the purpose of a rate case?
25 Isn't that why you're here, is to say we would like

1 to have recovery? Otherwise, why would you have
2 indicated these particular projects to us?

3 A. I understand what you're saying,
4 Commissioner, and I understand that it's reasonable
5 for you -- I mean, certainly within your authority
6 to look at the costs of facilities and say, we
7 really think that this cost was out of line and
8 that you shouldn't pay for it, we think that, you
9 know, this other cost was out of line. I think
10 there's a couple things going on in this case. I
11 think, first of all, the testimony of the advocacy
12 witnesses really mischaracterized what these
13 projects did for North Dakota customers. For
14 example, for King --

15 Q. But for that, I'm just asking you not to
16 go into why it would be good to approve the costs.
17 I'm just asking you to explain to me whether it
18 would require a stand-alone system if I chose to
19 not accept, let's say, the whole cost for one of
20 these projects. I think you've answered that. You
21 said no.

22 A. I don't think we're saying it will result
23 in having to have a stand-alone system. I think,
24 for example -- I'm going to use the Prairie Island
25 costs for example because your counsel has referred

1 to them as a super tax and it's a good example to
2 use. The fact that we were required to do certain
3 things to keep the Prairie Island plant operating
4 is what's keeping that plant operating today. It's
5 what's making that nuclear power available to
6 customers. And so if the North Dakota Commission
7 goes in and says, We really don't think our
8 customers should pay for these things, then in
9 effect they're saying we're not supporting the
10 costs of keeping the plant operating. Now --

11 Q. But what if we were saying instead that we
12 thought our customers would have just supported the
13 operating of that plant without that tax and so we
14 wanted -- we would have said go ahead and keep that
15 plant open, we think it's a great resource and we
16 want to have it in place in Minnesota, that's not
17 saying that we are -- I'm not going to argue with
18 you.

19 A. I know. I understand.

20 Q. I'm sorry, but it's just hard for me to
21 understand how us taking a close look at these
22 projects will -- you had to go to the Minnesota
23 Commission and ask for their approval for these
24 projects to go move forward. I think this is, in
25 my mind -- would you agree that this is the chance

1 for NSP to come to the North Dakota Commission and
2 ask whether we agree that these projects should
3 move forward and be recovered by ratepayers here?

4 A. I absolutely agree. And, certainly, we've
5 put forward our testimony that we believe that the
6 costs are prudent and we think that our reasoning
7 is sound. We also actually do believe that the
8 advocacy staff hasn't given you a good basis for
9 what you might even disallow if you want to
10 disallow something because they're ignoring certain
11 costs, like the cost of increasing capacity. You
12 know, I think that what we're really trying to say
13 is that when you have an integrated system and you
14 have those benefits of being part of a 10,000-
15 megawatt system and so you have the low-cost
16 nuclear power and you have the big coal plants and
17 you have things like that, you know, you accept
18 some of the good with the bad, and all of our
19 states accept some of the good with the bad, but
20 overall everybody benefits. And what we're really
21 saying is not that we would have to have a
22 stand-alone system in North Dakota, but that you
23 would be much worse off if we were compared to the
24 costs that we're proposing in this case.

25 Q. It does concern me that, for example, in

1 the Grand Meadow wind project you weren't even able
2 to take bids from other states to find out if that
3 was the least-cost resource. Do you have any
4 comment on that?

5 A. We are able to take bids from other states
6 for all of the other wind resources that we have
7 acquired over time, and even though North Dakota
8 has bid into those, because of infrastructure
9 problems and other problems, we haven't been
10 actually able to select and develop any of those
11 bids to this date. We're certainly working as a
12 company to improve that. We've got a petition in
13 to build a major transmission line that will help
14 North Dakota export enormously, and we actually
15 expect to see those projects explode in North
16 Dakota once we have the benefit of that line in.
17 But I think that in places where we have actually
18 been able to acquire North Dakota wind and they
19 have competed in our solicitations, they haven't
20 been selected or been able to be developed.

21 COMMISSIONER WEFALD: I don't think it's
22 the purpose to argue with a witness, so I'm not
23 going to continue this discussion except to say
24 that I just don't agree with you that there have
25 not been opportunities in North Dakota in the last

1 10 years to build wind, that you have not exerted
2 the same efforts in Minnesota to build wind. You
3 built transmission there, you built wind projects,
4 you know, you've worked hard on those. I just
5 don't understand that. But I don't believe that
6 there's -- I think there's a disconnect between --
7 there has been for the last 10 years between NSP
8 and North Dakota on that issue. So I don't --
9 although I think it's a major issue, it's one that
10 apparently there's no meeting of the minds.

11 With that I will conclude my questions.

12 JUDGE WAHL: Any further questions?

13 Commissioner Clark.

14 **EXAMINATION**

15 **BY COMMISSIONER CLARK:**

16 Q. And I would second that. I do think that,
17 in my mind, there's a disconnect, as well. You see
18 from a -- even from a kind of man-on-the-street
19 viewpoint, you see all of these other companies
20 investing quite a bit in wind energy in North
21 Dakota and other forms of energy and we're one of
22 the top energy-producing states in the country and
23 top exporting -- energy-exporting states in the
24 country and then to see our largest utility invest
25 almost nothing when all these other companies are

1 does create a business of a disconnect.

2 The High Bridge plant, remind me again how
3 long that has been on line and operational -- the
4 refurbished.

5 A. The refurbished plant is just coming on
6 line. I think we expect it -- it was fully
7 operational, I think, in June and is being
8 integrated into the system.

9 Q. Okay. So you don't have a sense yet for
10 how often that's going to be dispatched into the --

11 A. We've modeled it, and what we're really
12 seeing is that it's probably going to dispatch at
13 about the 40 to 50 percent capacity factor range.

14 Q. And remind me again, how does that compare
15 to your base load coal units?

16 A. Our base load coal units typically run --
17 you know, we usually call it about an 85 to 90
18 percent capacity factor because they certainly have
19 outages, both forced and maintenance outages, and
20 so they typically run, you know, probably about 90
21 percent of the time, but, you know, they are 24-7
22 facilities.

23 Q. Right. And you had said that up to this
24 point Sherco had not been at that 85 to 90 percent?

25 A. No, because we've had to use Sherco to

1 follow the ups and downs on our system. We haven't
2 had resources that have been flexible enough to do
3 that except for when we are at very high-peak
4 periods and our gas-peaking resources are on line
5 and then we can bring those up and down.

6 Q. I think you had mentioned that you just
7 simply didn't have the load to justify running
8 Sherco all out. Is that correct?

9 A. No, we didn't have the load to justify
10 running High Bridge and Riverside full out. We
11 didn't have the base load that would justify
12 running those resources around the clock on top of
13 our nuclear resources, our Sherco plant and our
14 King plant. The reason that we've been using
15 Sherco to follow load is because we didn't have any
16 other resources on our system that would allow us
17 to follow load before we took on some of these
18 intermediate resources that we could dispatch
19 ourselves.

20 Q. If -- would it have made more sense to run
21 the old King and High Bridge full out if you had
22 the load?

23 A. King has always run full out. It's a base
24 load.

25 Q. Maybe it's High Bridge and Riverside that

1 I'm asking about.

2 A. If we had had the load, we probably would
3 have been operating those plants more, but the
4 changing nature of our system where we tend to get
5 higher daytime peaks because of higher electrical
6 use during the day, it was really calling for, you
7 know, plants that could operate more in an on-peak
8 period, and that's really how we were using those
9 plants. We were operating them more during on-peak
10 periods or during stretches of high load rather
11 than operating them full out like a base load
12 plant.

13 Q. Why would the State of Minnesota enact
14 MERP if this is what you were going to do, anyway?

15 A. The state saw the benefits of the
16 environmental reduction in passing the statute.

17 Q. But if the state was going to see the
18 environmental benefits under existing law, then why
19 would the state need to pass a new law to encourage
20 what was going to happen, anyway?

21 A. We certainly had alternatives to MERP. We
22 could have shut down those plants and gone and
23 built new plants somewhere elsewhere where they,
24 you know, would not have perhaps achieved the
25 same -- you know, you might have had higher

1 environmental impacts, for example, by replacing
2 High Bridge with a very high-cost coal plant.

3 Q. But my understanding was regardless of
4 whether you had the legislation enacted, you
5 weren't going to do that, that you were going to do
6 just what you did.

7 A. No. Regardless of whether the legislation
8 was enacted, we had to do something with those
9 plants.

10 Q. Right.

11 A. We had to refurbish them, we had to
12 repower them. I don't think that we can say as a
13 company that if that statute had not passed, we
14 would have done exactly what we did. I can't also
15 tell you what else we would have done because
16 certainly the statute was passed and that's all in
17 the past and, you know, we did what we did. But
18 absent that legislation, we still had to do
19 something with those plants. They were at the end
20 of their life.

21 Q. So prior to the legislation, what did your
22 integrated resource plan call for and how did that
23 compare with what ultimately happened with King,
24 High Bridge, eventually Riverside, Sherco?

25 A. I don't know exactly what our integrated

1 resource plan called for prior to that time. I
2 wasn't with the company in those years.

3 Q. I think you can understand the concern and
4 what we're trying to put figures to, which is that
5 it might seem too convenient to have an IRP that
6 says one thing, the Minnesota legislature come in
7 with a particular policy enactment and then all of
8 a sudden things change and we're told, oh, but it
9 was the low-cost resource, anyway, so don't worry
10 about what the legislature did, and that's really,
11 I think, what we're attempting to get our arms
12 around and try to quantify exactly so we can figure
13 out what's used and useful for North Dakota.

14 A. Commissioner, I think -- and I think Mr.
15 Larson discussed this, as well. I think it's
16 probably fair to characterize MERP in this way. We
17 started in the 1999-2000 time frame to look at what
18 we could possibly do with those plants. We came up
19 with these alternatives, and the alternative to
20 refurbish King and to repower High Bridge and
21 Riverside, you know, came to the top of the list
22 because they did and they were the best
23 alternatives as we looked at all of our options
24 with those plants. Now, you know, they represented
25 about a billion dollars worth of investment, and,

1 you know, we felt at the time that to make that
2 kind of investment, that we would like to see more
3 of a realtime recovery of some of those costs, if
4 possible. And, you know, we advocated for the MERP
5 statute. You know, this wasn't something that the
6 legislature came up with and imposed on us. We
7 advocated for it and it really was a tradeoff to
8 say we will give you these environmental benefits,
9 you'll give us realtime recovery of some of these
10 costs or you'll give the Minnesota Commission the
11 opportunity to look at this project and say that
12 this is worth the tradeoff. The legislation didn't
13 mandate the projects. They didn't take any
14 authority away from the Commission. We still had
15 to go through a very detailed permission there.
16 They don't take any authority away from you,
17 certainly. But, you know, this was an example of
18 an area where we actually went in, did the study,
19 we looked at what we thought would be the best
20 thing to do, and then we looked for mechanisms that
21 would get us to the -- would get us to those
22 projects, and the MERP statute was the ultimate
23 solution.

24 Q. So the environmental benefits that was one
25 side of that, sort of the tradeoff that you

1 mentioned, are they environmental benefits that are
2 above and beyond what federal law requires?

3 A. You know, currently they're not. We
4 actually anticipated fairly well -- and Mr. Rosvold
5 is a good person to ask this question to, but we
6 actually anticipated fairly well what requirements
7 would be coming in in the future because at the
8 time that we planned MERP, there were actually some
9 of the air requirements that looked like they
10 exceeded some of the federal standards. And since
11 then, of course, we've had the passage of CAIR,
12 we've had the passage -- or, you know, of
13 working -- EPA is working on CAMR and all of those
14 federal requirements have actually caught up. And
15 so instead of having, you know, built projects that
16 we now have to retrofit, we've actually built
17 projects that are in compliance with current
18 regulations.

19 Q. Did Minnesota get a bad deal then
20 considering the federal -- the feds would have made
21 them do it, anyway, and so they didn't really get
22 anything that they wouldn't have had and Xcel got
23 accelerated recovery of what they were planning to
24 do, anyway?

25 A. I don't think Minnesota got a bad deal. I

1 think that customers gave us realtime recovery of
2 the plant instead of delayed recovery, but I don't
3 think overall they paid more money.

4 Q. Are you aware, Southwest Public Service in
5 New Mexico and Texas, how large a load that serves?

6 A. I'm -- you know, I'm not entirely sure. I
7 should be embarrassed to admit that. But I know
8 it's quite a bit smaller.

9 Q. I'm just curious what it's profile is
10 compared to, say, the Dakotas, North and South.

11 A. I'm sorry, I can't answer.

12 Q. Is there somebody who I'll be able to ask
13 that?

14 A. We can find out.

15 Q. Or find out.

16 A. Yeah.

17 Q. Okay.

18 JUDGE WAHL: Is that a delayed exhibit,
19 Commissioner?

20 COMMISSIONER CLARK: A delayed exhibit or
21 a tendered witness who could answer offhand.

22 JUDGE WAHL: Well, let me ask, do you have
23 a preference?

24 COMMISSIONER CLARK: No.

25 JUDGE WAHL: Mr. Bradley or --

1 MS. HERTZLER: Your Honor, I don't think
2 we have a witness that would necessarily be able to
3 testify to this amount, so we're happy to provide
4 the Commissioner with a late-filed exhibit that
5 would show the SPS load and compare it to North
6 Dakota.

7 COMMISSIONER CLARK: Sure. North
8 Dakota -- actually, each of the jurisdictions that
9 Xcel North operates in, Minnesota, North Dakota,
10 South Dakota, Wisconsin, northern Michigan.

11 JUDGE WAHL: So what is the title of the
12 exhibit going to be?

13 MS. HERTZLER: The amount of SPS load as
14 compared to --

15 JUDGE WAHL: SB --

16 MS. HERTZLER: SP, as in Paul, S.

17 JUDGE WAHL: PS. Okay. Load --

18 MS. HERTZLER: Load as compared to NSP-MN
19 jurisdiction load.

20 COMMISSIONER WEFALD: Do you want --
21 excuse me. It would be helpful for me if that NSP
22 jurisdiction load was broken down by state.

23 COMMISSIONER CLARK: Yes.

24 COMMISSIONER WEFALD: And also then the --
25 what's the load in New Mexico and Texas.

1 MS. HERTZLER: SPS covers New Mexico and
2 Texas, so we should be able to break it down quite
3 easily and show that and then compare it to the
4 different jurisdictions for NSP-Minnesota.

5 COMMISSIONER WEFALD: Thank you.

6 JUDGE WAHL: All right.

7 COMMISSIONER CLARK: Okay. Thanks.

8 Q. (COMMISSIONER CLARK CONTINUING) I may be
9 reading a little bit between the lines in your
10 testimony, but my sense was that in analyzing a
11 coal option of some sort at High Bridge, a
12 determination was made that politically within
13 Minnesota a coal plant in that location just wasn't
14 going to fly, that the environment is anti --
15 sufficiently anti-coal that that just wasn't an
16 option. Is that correct?

17 A. I think it was more a -- I think it was
18 more a function of the location right in the middle
19 of the City of St. Paul than it was a general
20 anti-coal sentiment at the time. We did not
21 believe that we could get a new coal plant
22 permitted in the middle of the City of St. Paul.

23 Q. Did Xcel go so far as to price out what
24 the difference in cost would be for the delivered
25 price of energy from a new, state-of-the-art coal

1 plant at the High Bridge location as opposed to the
2 natural gas option that was selected?

3 A. No, we didn't.

4 Q. Would there be any way for the Commission
5 to conduct that kind of apples-to-apples comparison
6 where we could say, here's what the delivered price
7 of energy would be from a new, state-of-the-art
8 coal plant versus a natural gas plant that was
9 built given the very high cost of natural gas?

10 A. Certainly we have the estimates that could
11 look at that. I think that when you make a
12 resource decision -- when you make a decision to
13 make a capital investment, you make it based on the
14 information that you know at the time, and
15 certainly during the MERP proceeding, our natural
16 gas forecasts were pummeled and cut and spindled
17 and all sorts of things, and ultimately at the end
18 of the day when everybody looked at what we put
19 forward at the time that we were making the
20 decision to make the investment, they agreed that
21 this was the best option to move forward.
22 Certainly I think there are a lot of decisions
23 where we can look back in hindsight and say, Well,
24 gosh, if we knew natural gas was going to be \$11 in
25 2008, maybe we wouldn't have done that. But in

1 that 2003 time frame when we were making that
2 decision, there was, you know, no indication from
3 any of the reasonable forecast sources that you
4 would see that kind of natural gas price in the
5 future, and that was evaluated and at the time that
6 decision was prudent.

7 Now, that being said, you know, as we
8 model our resource plans going out into the future,
9 even with the higher natural gas prices, we are
10 still seeing an appropriate role for natural gas,
11 even natural gas combined-cycle on our system, and
12 so I don't think you can even say that we would
13 look back now and say, you know, High Bridge was a
14 bad decision based on the price of natural gas.
15 Natural gas is still showing up as reasonable and
16 prudent for future resources in our resource plan,
17 not even just the ones that we're operating.

18 Q. Is that assuming high carbon regulation
19 cost, though?

20 A. That's assuming some carbon regulation
21 cost, but, actually, we also modeled our resource
22 plan at no carbon regulation cost. And with the
23 cost of new coal-fired capacity running in the
24 2,500 to \$3,000 a kW at this point, it's actually
25 not being selected as economic on our system even

1 if we don't consider the cost of carbon.

2 Q. Is that figuring in that if we do have
3 carbon regulation, that it's quite likely that the
4 cost of natural gas will go even higher than it is
5 today?

6 A. That's figuring in in our current natural
7 gas forecast, which escalates from current prices.

8 Q. Isn't it reasonable to assume, though,
9 that any carbon regulation at all will have a
10 proportionate impact on the cost of natural gas as
11 utilities are incented to move to natural gas as
12 opposed to other forms of generation?

13 A. It may. I think that costs will tend to
14 equalize in the market so you will see the cost of
15 purchasing allowance versus the cost of fuel
16 switching versus the cost of -- versus the cost of
17 capturing and sequestering carbon, you know, will
18 all start to even out in a market. That's what the
19 market is there for, it's to allow those costs to
20 even out and for people to become indifferent to
21 them.

22 Q. You mentioned the market in a number of
23 spots, and I think I may have asked a similar
24 question to Mr. Larson. You compare Xcel's costs
25 to the market costs and that by being a little bit

1 lower than the market, it's somehow proving that
2 it's a good deal for consumers. Is that the right
3 comparison, though, for this Commission? Should
4 the Commission be looking at Xcel's costs versus
5 what the market clearing costs are, or should it be
6 what Xcel is proposing versus what the low-cost
7 alternative could have been? In other words, is
8 the market even really a relative comparison for us
9 to consider as far as whether consumers are getting
10 a good deal?

11 A. I think the market is a relevant
12 comparison because it's where we go or where any
13 utility goes if they don't have the resources put
14 in to meet their costs. Now, certainly you can
15 look at any decision and say based on what you knew
16 at the time, you know, was there a lower cost or
17 better alternative that you should have employed
18 and base your rate decisions on that metric. We
19 believe that the market represents what decisions
20 have been made by utilities over time and,
21 therefore, it provides a pretty good proxy for what
22 the cost of electricity would be, you know, if we
23 had gone through and, you know, done other things,
24 done alternatives.

25 Now, I know one question that you asked

1 Mr. Larson that he deferred to me was, is the MISO
2 market a gas-driven market? And actually the
3 answer to that is no, surprisingly. I think a lot
4 of people do think it is a gas-clearing market.
5 But actually in the last year coal has been on the
6 margin in MISO 65 percent of the time and gas has
7 only been on the margin 35 percent of the time. So
8 you can see that on -- you know, on a market look,
9 you're actually getting a pretty good snapshot of
10 what kind of electricity is being delivered. It's
11 not an all gas market. It's not just always
12 clearing at the gas price. It's clearing at what's
13 available at the time, and it looks a little bit
14 worse than our mix, and so I think that if you
15 compare our mix to the market, it says we're doing
16 a pretty good job.

17 Q. You said that the time frame for that,
18 that you were using to determine that the market
19 cleared with coal more often than natural gas was
20 what time frame?

21 A. It's the last year. So it's from February
22 2008 MISO report to the February 2007 MISO report.

23 Q. Didn't we have a temporary drop, though,
24 in natural gas costs last year, and they have been
25 steadily rising?

1 A. Let me just say, I think a temporary drop
2 might mean that it went to \$8, but I don't know
3 that I would necessarily call that a drop.

4 Q. Hypothetically speaking, if Minnesota
5 said, You know what, we're in a budget deficit,
6 we're going to triple the corporate tax on
7 utilities. In a situation like that, would it be
8 fair for North Dakota to be allocated the cost of
9 that new tax simply because we happen to be part of
10 this integrated system?

11 A. First of all, I want to make it clear that
12 I'm not testifying as to the appropriate
13 recoverability of any costs that any jurisdiction
14 wants to impose. I am testifying that the costs
15 that we proposed in this case --

16 Q. Sure.

17 A. -- benefit North Dakota customers and are
18 reasonable.

19 Q. And that's probably better directed, as I
20 think about it, to a different witness because it
21 is outside the scope of resource planning.

22 A. But I do think that -- you know, if it's
23 an issue such as if you don't -- you have a choice
24 to pay this cost or shut down the plant, you know,
25 then it does -- as I had said to Mr. Bahr, you

1 know, then it does go to the operating cost of the
2 plant. We have to pay the cost or shut down the
3 plant. If it goes to something else, you know,
4 then I think there's a great deal more discretion
5 involved.

6 Q. But as I understand, I don't think staff
7 is advocating that we shut down the plant. They're
8 just saying recover it from the people whose
9 elected representatives imposed the cost and that's
10 this other jurisdiction. Isn't that what they're
11 arguing?

12 A. Well, that may be what they're arguing,
13 but I think that the issue remains that if we don't
14 pay the cost, then we have to shut down the plant.
15 It's a cost of doing business in the place where
16 the plant happens to be operating, which is
17 Minnesota. So, you know, we have a choice. We can
18 pay the cost and continue to operate the plant or
19 we cannot pay the cost and shut down the plant and
20 find some other alternative. The fact that we
21 choose to pay the cost allows us to continue
22 operating the plant, which allows us to continue to
23 allow that low-cost power to come to customers.
24 Those are the kinds of costs that we believe are
25 appropriately shared by all of the customers,

1 because absent that -- absent paying that cost, you
2 wouldn't have the benefit of that power. I think
3 sort of the bottom line is that there's really no
4 free energy available out there and that, you know,
5 it costs money to produce energy and, you know,
6 we're just seeking recovery of those costs that we
7 believe are reasonable and prudent.

8 COMMISSIONER CLARK: That's all I have.

9 JUDGE WAHL: Commissioner Cramer.

10 **EXAMINATION**

11 **BY COMMISSIONER CRAMER:**

12 Q. You answered one question already that I
13 had and that was, was such great dependence on
14 natural gas a bad idea looking back now, but you
15 said it is not. Is there some floor for the price
16 of natural gas where it was a bad idea?

17 A. I think you have to analyze every
18 situation from an economic standpoint. Now, when
19 we analyze our plans, we take our current forecast
20 and we flex it up 20 percent and we flex it down 20
21 percent and, you know, we look overall, you know,
22 geez, if the cost of natural gas goes up 20
23 percent, are we still in a good place, do our plans
24 change? You know, right now our plans don't
25 change. I can't say that there's no cost where we

1 would say, no, we don't think we should go ahead
2 and do natural gas plants; but, you know, certainly
3 we've tried to look at scenarios that anticipate
4 costs that are higher than what we propose and we
5 haven't actually seen changes in our plan.

6 Q. I need some clarification on something I
7 think you said earlier, but I might have heard it
8 wrong. You said something to the effect that --
9 you were comparing the peak need with peak wind, if
10 I might.

11 A. Mm-hmm.

12 Q. Something to the effect that when the wind
13 capacity is at its highest in North Dakota is when
14 you need it the least. Did you say something to
15 that?

16 A. I think what they're really trying to get
17 at is in the hot days in the summer when, you know,
18 we peak, so we have this very heavy need for
19 capacity, you know, the wind generally isn't
20 blowing. But, you know, the reason that doesn't
21 concern us is because we don't actually view wind
22 as a capacity resource. We view wind as an energy
23 resource. We expect it to supply a certain amount
24 of energy to our system year-round and that
25 actually displaces energy that's quite a bit higher

1 priced. In fact, a lot of it is natural gas-fired
2 generation. You know, the fact that it's not there
3 in our peak hour doesn't worry us because we have
4 plants that can do that. We have plants that we
5 can fire up for a couple of hours and serve that
6 peak need even when the wind isn't blowing. But
7 getting the wind on a year-round basis is what
8 lowers our costs overall because we're to displace
9 more expensive resources with those wind resources.

10 Q. That was a good explanation. I appreciate
11 that. I've never quite heard it like that, because
12 I always hear the other argument, you know, about
13 wind not being a good resource for that very
14 purpose. I appreciate that.

15 With regard to this February -- December/
16 February RFP 500 megawatts of wind, I think you
17 testified -- let me back up. Has that closed now?

18 A. No, it's not. We're still --

19 Q. The RFP is --

20 A. We are still evaluating the proposals and
21 working due diligence with bidders that have been
22 proposed.

23 Q. But the RFP is closed? In other words,
24 all proposals are in?

25 A. All proposals are in, yes.

1 Q. I think you testified that there are some
2 North Dakota projects that are being analyzed, or
3 are you not able to say that yet?

4 A. Yes, there are North Dakota projects. I
5 can't give you specifics on what they are.

6 Q. When do you anticipate that that final
7 decision will be made?

8 A. We expect to have actually a selection of
9 projects by -- I think by August. I know that
10 we've just recently gone out and asked everybody to
11 reprice because of some things that have been going
12 on in the market, and so that may delay it a little
13 bit because we have to ask everybody to kind of get
14 their pricing back in order again, but the target
15 right now is August.

16 Q. I might want to just explore a little
17 further this notion of -- we talked a lot about --
18 you talked a lot about an integrated system, and
19 then it's almost been implied that having North
20 Dakota generation somehow means we're no longer
21 part of an integrated system. I mean, I don't
22 think that's what you mean or anybody means, but
23 there's been some implication of that. Would
24 having a wind project or a cogeneration project or
25 some other project in North Dakota, perhaps near

1 North Dakota load, that might cost a little bit
2 more than a similar project somewhere else in your
3 system, mean that we were no longer part of an
4 integrated system?

5 A. No, and that's not really what I'm trying
6 to say and I'm afraid that it's been -- a lot of
7 what we've been trying to say on an integrated
8 system has been misunderstood, and so hopefully I
9 can correct that.

10 I think what we're saying is, here's our
11 fear, and I think it was laid out in Mr. Larson's
12 rebuttal. You know, one of our fears is that, for
13 example, if certain decisions get made in one
14 jurisdiction -- we'll give a hypothetical again.
15 If North Dakota says we're not going to pay any of
16 the costs that you had to incur to keep Prairie
17 Island open, then Minnesota starts looking at that
18 and saying, well, we have to pay all of those costs
19 for Prairie Island and nobody else is going to pay
20 it, well, then we want all of Prairie Island, we
21 want all of that energy from that nuclear plant to
22 come to Minnesota customers and you can't send it
23 to any other customers, you know, and then suddenly
24 you've lost the benefit of that low-cost nuclear.

25 I think -- those are the things that we

1 don't want to happen because that actually creates
2 problems, you know, both for our customers because
3 it creates higher costs and it creates problems for
4 us, because then suddenly we're scrambling to kind
5 of reallocate resources and figure out what
6 resources have to go to which jurisdictions based
7 on, you know, who's paying for what benefits.

8 But having the integrated system, you
9 know, that would mean, for example, that if we were
10 to install a cogeneration facility or an energy
11 facility in North Dakota, we would expect all of
12 our customers in our other jurisdictions to pay, as
13 well, our Wisconsin jurisdiction and our Michigan
14 and South Dakota and Minnesota. And if we could
15 justify doing that, I think that we would -- we
16 wouldn't have any problems doing that. That's what
17 we're really proposing on a going-forward basis.

18 You know, we had a -- throughout the '90s
19 and even up to sort of very recently, we had a very
20 rigid bidding requirement for our new resources and
21 everything that we did except for a project like
22 the MERP project, which is one of the things that
23 made the MERP project so advantageous was we didn't
24 have to go and bid it. So anything that we were
25 repowering or refurbishing we could do on our own

1 without bidding, but everything else we had to bid
2 competitively, and not only did we have to bid
3 competitively, but it was very, very difficult for
4 us in Minnesota to compete in that process with our
5 own project, and so you'll see that there's a big
6 stretch of time where we didn't actually own
7 anything. We didn't build anything, we didn't own
8 everything. Everything went out for competitive
9 bid, and, you know, evaluation was rigid enough
10 that we couldn't say, well, we'd rather put this in
11 North Dakota. You know, it was really very
12 strictly, you know, least-cost economics, you know,
13 where can you put it the cheapest and do it the
14 best.

15 And, you know, in our last Minnesota
16 resource plan, we actually received a great deal of
17 new flexibility in our bidding requirements. We
18 now have a specific process to be able to make our
19 own proposals for power plants in a fashion that
20 would still be able to look at competitive
21 benefits. We're able to make commitments pursuant
22 to legislation actually to build our renewable
23 facilities anywhere that we want to without any
24 benefit of competitive bidding as long as it's
25 there to meet the RDF.

1 And so we now have the tools going forward
2 to be much more flexible in, you know, where we put
3 our resources, which is why the commitment that
4 I've made in my testimony, and what Mr. Larson has
5 made in his testimony, is that we now have the
6 tools to sit down and work with you and to say, you
7 know, we can look at cost-effective facilities that
8 could be located in this area. You know, we have
9 other tools, we're planning investment and
10 transmission that's going to open up North Dakota
11 to generation. So, you know, whereas we haven't
12 really felt in the past few years that we've had
13 the tools to do those kinds of things, we really
14 feel like now they're in place and we're ready to
15 move future in the future.

16 Q. That is wonderful news and it's comforting
17 to hear. You articulated it very well, as did Mr.
18 Larson. Do you understand why we're skeptical?

19 A. I certainly understand why you're
20 skeptical.

21 Q. I mean, our legislature has generally --
22 and our governor has generally passed legislation
23 to provide incentives to build in North Dakota,
24 Minnesota traditionally has imposed costs to build
25 in Minnesota, and all the building occurs in

1 Minnesota because the penalties are in existence
2 there for not building. And so, at any rate, I'm
3 very pleased to hear you say that. I also
4 appreciate your empathy for us. Are there any
5 commitments you can make beyond just going forward,
6 we're going to try to do better?

7 A. Well, we have made the commitment to
8 install at least 200 megawatts of wind in the state
9 by 2011. We are actively working on putting that
10 in. I know -- I think in questioning with Mr.
11 Larson, he said that's all still in the planning
12 stage, but actually it is in the active bidding
13 stage. It's all part of the 500-megawatt RPF, and
14 so we're way beyond the planning stage and we're
15 actually in the bidding stage, and we will be
16 working actively to get those projects located and
17 to fulfill that commitment, and, you know, I think
18 we're really hoping that we can expand that
19 commitment, because certainly as we look at -- you
20 know, we feel that diversifying our wind resources
21 are a really good thing to do, as well. You know,
22 we don't want them all in, you know, one area
23 connected by one line to our major load center,
24 either, and so we actually see the benefits in
25 that.

1 Q. I was going to ask you actually in terms
2 of resource diversity, isn't geographic diversity a
3 value, as well?

4 A. Absolutely, it is.

5 Q. Also, I might just state and then frame a
6 question. You know, when we talk about North
7 Dakota investment and when our governor encourages
8 North Dakota investment and whatnot, it's not like
9 we don't have some knowledge and ability and
10 expertise in developing and generating electricity
11 and transmitting it. We are a major
12 energy-producing state. And so the implication
13 that I hear sometimes is that North Dakota never
14 meets the Xcel standard for cost-effectiveness.

15 And my question then would be, if we
16 don't, how come we meet GRE's, which is a
17 Minneapolis -- Twin City-based utility with no
18 consumers in North Dakota, or Minnesota Power, we
19 just committed to -- talking about 600 megawatts of
20 wind in North Dakota and associated transmission to
21 get to their Minnesota customers, Minnkota, Otter
22 Tail Power -- why do these investments in North
23 Dakota meet their economic standard, but none of
24 them ever meet Xcel's standard?

25 A. Well, first of all, you are talking about

1 investments that took place a lot of years
2 before -- actually, way before I was even in
3 regulation, and so some of those I can't really go
4 back -- Coal Creek Station and some of those, you
5 know, it's hard to go back and say, you know, this
6 is what GRE -- or UPA and CPA at the time looked at
7 and said, you know, this makes sense for us to do,
8 whereas Xcel Energy actually said Sherco 3 -- you
9 know, NSP said Sherco 3 was a better thing to do in
10 that time frame. I don't know what the specific
11 analysis was.

12 I do know that in the last 15 years we
13 haven't invested in anything. You know, we went
14 for a long, long stretch, from 1987, when we
15 brought Sherco 3 on line, to the 2004-2005, when we
16 actually brought Peakers on at Anson and Blue Lake.
17 You know, that was a long stretch between major
18 investments in power generating facilities, because
19 we didn't have the tools in place to make those
20 investments. And so it's not even that we've
21 looked at it recently and said it's not
22 cost-effective. We just haven't been able to do
23 it.

24 And so, you know, now I think as we look
25 at, for example, building the line from Fargo to

1 the Twin Cities, that's going to change the
2 economic picture a lot for us. You know, Minnesota
3 Power actually can take advantage of this because
4 they're purchasing an existing transmission line
5 that's no longer needed to carry coal energy. The
6 coal energy they used to carry over it is now going
7 to be absorbed by the utilities that own the plant,
8 which was the plan all along. It was always the
9 plan that they would buy it for a time and then
10 Minnkota would eventually take it over. But, you
11 know, they have the advantage of having that line
12 already there. You know, we've got to go forward
13 and make the investment and build the
14 infrastructure, and, you know, that's one of the
15 things that has been holding us up up till now, but
16 the plans are in place now.

17 COMMISSIONER CRAMER: I understand, and
18 I'm not going to argue, either, except to say that
19 some of these are greenfield projects that I've
20 talked about, 240 megawatts at Langdon, 180 down at
21 the Ashtabula project and some others. But that's
22 all I have. Thank you.

23 JUDGE WAHL: Any further questions from
24 the Commission?

25 COMMISSIONER WEFALD: I have one.

1 JUDGE WAHL: Commissioner Wefald.

2 **FURTHER EXAMINATION**

3 **BY COMMISSIONER WEFALD:**

4 Q. That is on -- I turn it off in between so
5 people can't hear my pages flipping.

6 On page 7 of 37 of Charles W. King's
7 testimony he refers to a May 3rd, 2002, plan that
8 Minnesota -- that NSP had that included an
9 alternative proposal, that for about 550 million or
10 about half the cost of the adopted program, the
11 company could rehabilitate all three plants as
12 coal-fired units. You had said that all of the
13 plants -- in your previous testimony that all of
14 the plants that required about the same amount of
15 money. I would like you to comment on this May
16 3rd, 2002, plan that NSP had in place at one time
17 as an alternative plan.

18 A. The alternative plan, first of all, did
19 not actually -- the alternative plan focused on
20 alternative environmental improvements that we
21 could do at the different plants. So it did not
22 include a number of costs that are included in the
23 billion dollars. First off, it did not include the
24 cost of 400 megawatts of additional capacity that
25 we added as part of this plan, so it would have

1 taken the plants and it would have done the
2 environmental improvements that would have gotten
3 those plants up to, you know, what we would
4 consider to be reasonable levels for the area,
5 would have gotten them up to compliance with
6 federal standards and some other things that would
7 need to be done, but it wouldn't have added any of
8 the capacity and energy that we needed to meet our
9 growing system needs, so we still would have had to
10 incur those costs somewhere. It also didn't
11 actually include the costs of refurbishing the High
12 Bridge and the Riverside plants. It only included
13 the cost of putting environmental controls on
14 those. So on top of the 550 million, there would
15 have been the additional cost of doing the
16 refurbishment and life extension similar to what we
17 did at King.

18 So that alternative plan that was put
19 forward in this MERP proposal was simply the cost
20 of going in and doing some things environmentally
21 to those plants. It didn't provide anywhere near
22 the benefits or include all of the costs that we
23 got from the entire MERP project altogether, the
24 increased capacity, the new plants and those
25 things.

1 Q. At one point earlier this afternoon you
2 said we didn't have the load to run the High Bridge
3 full-time.

4 A. Yes.

5 Q. Well, then why did you need to add that
6 additional capacity to High Bridge that you just
7 said wasn't included here?

8 A. It has to do with the timing of the load.
9 I think you're familiar with load curves that say
10 that your energy is maybe lowest or in the
11 nighttime and then it peaks up during the day. So
12 what I was really saying when I said we didn't have
13 the load, we didn't have the energy needs to run
14 High Bridge full-time. So, for example, we didn't
15 have enough load, enough energy needs at night to
16 justify running all of our 1,500 megawatts of
17 nuclear and all of our 2,400 megawatts of Sherco
18 and our 500 megawatts of King and then another 250
19 or 500 megawatts of High Bridge and Riverside on
20 top of that. Our load would just go down too far
21 and so we would be turning down those plants or
22 turning them off, but we still needed them during
23 the day.

24 Now, turning your coal plants off at night
25 and turning them on during the day are a very

1 inefficient way of operating a coal plant, but it's
2 a very efficient way of operating a natural gas
3 combined-cycle plant, so we needed additional
4 capacity, but we didn't need the around-the-clock
5 energy that would justify building this new
6 capacity as a coal plant or that would justify
7 continuing operating the High Bridge around the
8 clock as a coal plant. What we did is we chose the
9 most economic resource to serve our energy at the
10 times that our customers needed it.

11 COMMISSIONER WEFALD: Thank you.

12 JUDGE WAHL: Any further questions from
13 the Commission? Followup, Mr. Bradley?

14 MR. BRADLEY: Thank you, Your Honor.

15 **REDIRECT EXAMINATION**

16 **BY MR. BRADLEY:**

17 Q. Ms. Engelking, one of the first questions
18 asked you was if North Dakota were created into a
19 separate subsidiary, would they pay for MERP costs.
20 Do you recall that question?

21 A. Yes, I do.

22 Q. Does Wisconsin, Minnesota, which is part
23 of the integrated system, does it pay for part of
24 the MERP costs?

25 A. Yes, it is paying for part of the MERP

1 costs.

2 Q. You had such good discussion -- some of
3 the things you and I were going to talk about you
4 already talked about with Commissioner Cramer. I
5 won't go back through those.

6 47 percent efficiency -- they had a
7 comparison between 47 percent efficiency and a 95
8 percent furnace efficiency. Do you recall that?

9 A. Yes, I do.

10 Q. Give me some understanding. What is 47
11 percent efficiency, and we're talking there
12 efficiency with regard to which plant?

13 A. We're talking about the High Bridge plant,
14 and it basically refers to the fuel conversion
15 efficiency, the amount of energy that's in the fuel
16 that actually gets converted into electricity on an
17 MMBTU basis.

18 Q. And if I were trying to figure out is 47
19 percent good or not so good, what can you tell me?

20 A. I would say that's a very, very high
21 efficiency for electric conversion facilities. For
22 example, a typical coal conversion facility is
23 about 33 percent efficient. A typical natural gas-
24 peaking facility is quite a bit less efficient than
25 that.

1 Q. You had a question which indicated that
2 Xcel Energy's peak load at one particular hour was
3 something like 8,840 units, or whatever, and only
4 17 megawatts of it was wind, and I think you've
5 discussed it, but it's worth, I think, hitting it
6 once more. Does it trouble you that only 17
7 megawatts on your peak hour, that peak day was from
8 wind?

9 A. No, because we have backup in order to
10 meet those peak hours.

11 Q. And are there times in which you get more
12 than 17 megawatts out of that wind capacity?

13 A. There are a lot of times when we get the
14 full 1,100 megawatts.

15 Q. And what's the benefit of when you do get
16 the higher output?

17 A. The cost of the energy that we're getting
18 from those wind facilities are much less expensive
19 than either the market cost where we would purchase
20 if we weren't getting that or operation of our gas
21 facilities.

22 Q. You've had some questions about partners
23 and why Xcel Energy hasn't partnered with other
24 utilities to build generation. Would you care to
25 comment on whether NSP would prefer or not prefer

1 to work with partners in building generation
2 plants?

3 A. First of all, typically partners get
4 together to build plants because none of them are
5 big enough to build a plant on their own. Because
6 we have such a large system, we can easily go out
7 and build a 500-megawatt plant on our own and
8 absorb it into our system, and we don't really need
9 to have partners.

10 Second of all, I think if a utility is
11 given a choice, they would prefer not to work with
12 partners in operating a plant just because
13 coordinating the dispatch of that plant and other
14 things to meet particular needs is difficult. But
15 I think the bottom line is, you know, even though
16 we've certainly talked with other utilities about
17 joining together to build plants at times, we don't
18 necessarily need to because of our size.

19 Q. You've had discussions with all three
20 Commissioners trying to better articulate what
21 Xcel's position is in this proceeding -- Xcel
22 Energy's position is in this proceeding with regard
23 to cost recovery. Is Xcel Energy in any way
24 indicating that imprudent costs should be
25 recovered?

1 A. No.

2 Q. So are there any costs that have been
3 identified for disallowance by advocacy's
4 consultants that you think are imprudent?

5 A. No. We believe that the costs we've
6 proposed in this case are reasonable and prudent.

7 Q. And are there any costs in this proceeding
8 which Xcel Energy is seeking to recover which it
9 doesn't think is a necessary expense?

10 A. No.

11 Q. Are there some costs related to the PI
12 settlement which Xcel Energy has not included in
13 this case?

14 A. Yes, there are costs related to the PI
15 settlement which we are not requesting recovery
16 from North Dakota customers. Those include the
17 costs of payments that we make to the Prairie
18 Island Indian Tribe. Those are paid entirely by
19 Minnesota ratepayers. Also, the costs of Renewable
20 Development Fund contributions that pay for
21 research and development projects from which North
22 Dakota actually receives a great benefit to its
23 educational institutions, those are paid entirely
24 by Minnesota ratepayers.

25 Q. Can you articulate for us the distinction

1 that the company and yourself have drawn between
2 those types of expenses which it's not seeking
3 recovery in North Dakota and the expenses that are
4 being argued in this case?

5 A. The expenses that we're seeking recovery
6 from in North Dakota are the expenses that are
7 related to energy-producing resources. So the
8 expenses that came out of the PI mandates that
9 actually are producing energy that are serving all
10 of the customers on the integrated system, and that
11 would include the wind requirements, the biomass
12 requirements, and the energy-producing component of
13 the Renewable Development Fund, are the costs that
14 we're seeking to produce -- to recover from North
15 Dakota customers. Customers are receiving the
16 energy from those resources as part of the
17 integrated system and, therefore, we are asking
18 that we recover the costs of that energy from those
19 customers.

20 Q. And is it the basic position of Xcel
21 Energy that if North Dakota were to decide not to
22 pay for 25 percent of the cost of wind energy, that
23 there ought to be some sort of replacement in order
24 to prevent North Dakota customers from getting free
25 energy?

1 A. Yes.

2 MR. BRADLEY: I have no further questions.

3 JUDGE WAHL: Followup, Mr. Bahr?

4 MR. BAHR: I don't have any. Thank you.

5 JUDGE WAHL: Any further questions from

6 the Commission? Thank you very much, Ms.

7 Engelking.

8 THE WITNESS: Thank you.

9 JUDGE WAHL: Mr. Bradley.

10 MR. BRADLEY: Thank you, Your Honor. At

11 this time we would call Richard Rosvold to the

12 stand.

13 JUDGE WAHL: Mr. Rosvold, as you have
14 heard me advise previous witnesses, your testimony
15 is required to be under oath and I'm required by
16 law to advise you regarding perjury before
17 administering the oath. Perjury is a false
18 statement of material fact which you do not believe
19 to be true; in other words, generally speaking, a
20 lie. In North Dakota perjury is a Class C felony,
21 punishable by a fine up to \$5,000, imprisonment for
22 a period of up to five years, or both. Will you
23 raise your right hand, please?

24 (Witness sworn.)

25 JUDGE WAHL: Mr. Bradley.

1 MR. BRADLEY: Your Honor, I was just
2 inquiring from your court reporter if she needed a
3 break. I was watching her flex her fingers.

4 JUDGE WAHL: We'll be in recess for ten
5 minutes then, until 3:40.

6 (Recess taken.)

7 JUDGE WAHL: All right. Let's be in
8 order. All right. Mr. Bradley, when you're ready.

9 MR. BRADLEY: Thank you, Your Honor.

10 **RICHARD A. ROSVOLD,**
11 being first duly sworn, was examined and testified
12 as follows:

13 **DIRECT EXAMINATION**

14 **BY MR. BRADLEY:**

15 Q. Mr. Rosvold, would you please state your
16 name and title for the record?

17 A. My name is Richard A. Rosvold. I'm the
18 air quality manager for Northern States Power
19 Company in Minnesota and Wisconsin.

20 Q. Mr. Rosvold, did you prepare rebuttal
21 testimony in this case?

22 A. Yes.

23 Q. We've had that marked as Exhibit 11. Do
24 you have any additions, corrections or deletions
25 that you'd like to make to your testimony?

1 A. No.

2 Q. If I were to ask you the same questions
3 today as were contained in your prefiled testimony,
4 would your answers be the same?

5 A. Yes.

6 MR. BRADLEY: Your Honor, at this time
7 we'd like to move Exhibit 11.

8 MR. BAHR: No objection.

9 JUDGE WAHL: Exhibit 11 is received.

10 MR. BRADLEY: And Mr. Rosvold is available
11 for cross-examination.

12 JUDGE WAHL: Mr. Bahr.

13 **CROSS-EXAMINATION**

14 **BY MR. BAHR:**

15 Q. Mr. Rosvold, based upon page 3 of your
16 testimony -- or your rebuttal testimony, it's my
17 understanding that it's your position that
18 Minnesota's environmental regulations are no more
19 stringent than the federal regulations; is that
20 correct?

21 A. That's correct in that situation, yes.

22 Q. Do you have a copy of Mr. King's exhibits?

23 A. I do.

24 Q. Would you turn to Exhibit 1 to Mr. King's
25 testimony?

1 A. Yes, I'm there.

2 Q. And do you know that document? Are you
3 familiar with that?

4 A. Information request 7-1?

5 Q. Correct.

6 A. Yes.

7 Q. On page 2 of that exhibit, what is the EPA
8 new source review standard for particulate matter?

9 A. For total particulate matter?

10 Q. Correct.

11 A. 0.015 pounds per million Btu.

12 Q. And what is the Minnesota standard?

13 A. Minnesota standard is 0.4 pounds per
14 million Btu.

15 Q. And obviously you would agree that the
16 Minnesota standard is higher?

17 A. That's correct. It's a higher standard,
18 which is more easily met.

19 Q. How about for sulfur dioxide, what is the
20 EPA new source review standard?

21 A. The new source review standard is 0.12
22 pounds per million BTU with a 30-day rolling
23 average.

24 Q. And the Minnesota standard?

25 A. The one-hour average is 3.0 pounds per

1 million Btu.

2 Q. And when you break that down, would you
3 agree the Minnesota standard is higher?

4 A. It is a higher value, yes.

5 Q. Now, the EPA standards listed on this
6 table apply only to new source review; correct?

7 A. These are the limits that were established
8 for the King plant by going through the permitting
9 process, following the new source review process.

10 Q. Can you explain to me what the new source
11 review process is?

12 A. The new source review process requires you
13 to first determine whether or not you have a
14 significant emissions increase. If you do have a
15 significant emissions increase, then you are
16 subject to applying -- or performing the best
17 available control technology analysis to determine
18 what the most cost-effective control technology
19 would be. You're also required to conduct an
20 ambient air quality analysis and you're also
21 required to complete an additional impacts analysis
22 under a full new source review process.

23 Q. Now, was the King plant required to meet
24 the federal new source review standards?

25 A. The King plant went through the process --

1 through the first step, the applicability analysis,
2 determined that there was no emissions -- or net
3 emissions increase -- or significant net emissions
4 increase because of the proposed controls as part
5 of the rehabilitation project.

6 Q. Okay. So they did not need to meet the
7 standards that are listed on page 2 of the exhibit,
8 the federal standards?

9 A. At that point in time those were the
10 limits that were consistent with the control
11 technology that was proposed as part of the MERP
12 analysis.

13 Q. How about with regard to the Minnesota
14 standards, was it required to meet those, the ones
15 listed on page 2?

16 A. Yes.

17 Q. So if I understand you correctly, you
18 would agree that the King plant did not have to
19 meet the federal standards, but it did have to meet
20 those Minnesota standards listed on page 2 of the
21 exhibit?

22 A. I wouldn't characterize it that way. Once
23 you propose a project and determine that you're
24 going to move forward with touching the boiler to
25 modify the boiler, then the new source review

1 requirements apply to you, so that you either have
2 to demonstrate an emissions reduction or you have
3 to -- so that you don't actually trigger into the
4 program or you have to enter the program and go
5 through the applicability analysis, the BACT
6 analysis, the ambient air quality analysis, et
7 cetera.

8 Q. And as we discussed, you did not need to
9 go through that in this case with the King plant?

10 A. Correct, because of the proposed emission
11 reductions.

12 Q. Now, beginning on page 3 of your rebuttal
13 testimony, you discussed the Mercury Control
14 Program. Is it your testimony that the Mercury
15 Control Program was motivated by federal standards,
16 not Minnesota legislation?

17 A. Mercury Control Program has been coming at
18 us a long time. The Clean Air Act amendments of
19 1990 required utilities to study mercury emissions,
20 and EPA has been working towards reducing mercury
21 emissions ever since. The first official rule that
22 was passed to regulate mercury emissions anywhere
23 in the country, or in the world, for that matter,
24 was the Clean Air Mercury Rule from coal-fired
25 utilities.

1 Q. Okay. I'm not sure if you answered my
2 question or if I just lost the question.

3 A. Could you repeat it?

4 Q. Yes. The question was, was the Mercury
5 Control Program motivated by the federal standards
6 or the Minnesota legislation?

7 A. The federal standards started us down the
8 path.

9 Q. Were the requirements -- federal standards
10 in place that imposed the Mercury Control Program?

11 A. The Clean Air Mercury Rule was proposed
12 before the Minnesota Mercury Emission Reduction
13 Act, so, yes, we were moving to meet the federal
14 requirements.

15 Q. If I understand it, a proposed rule isn't
16 a federal requirement. It is a proposed
17 requirement. Correct?

18 A. The promulgated Clean Air Mercury Rule was
19 promulgated prior to the issuance or promulgation
20 of the Minnesota Emission Reduction Act, so it came
21 first.

22 Q. Okay. So there was a proposed rule that
23 was what, in a comment period or --

24 A. No. The Clean Air Mercury Rule became
25 effective on May 18th, 2005, as my testimony reads.

1 The Minnesota Mercury Emission Reduction Act was
2 approved in May of 2006.

3 Q. I'm going to give you just the first two
4 pages, because we don't need to reference the other
5 pages, of NSP's response to information request
6 3-4. Are you familiar with that document?

7 A. Yes.

8 Q. And at the bottom of page 1 it discusses
9 the company's Mercury Control Program; is that
10 correct?

11 A. That is correct.

12 Q. Then if you turn to page 2, would you read
13 the last sentence in the top paragraph?

14 A. "These projects would have gone beyond
15 the mercury reduction requirements of the federal
16 Clean Air Mercury Rule (CAMR) prior to its vacatur
17 on February 8, 2008."

18 Q. Could you read the next paragraph?

19 A. "Currently the company is deferring the
20 preliminary costs associated with these projects
21 such as for mercury monitoring equipment.
22 Significant expenditures will not begin until 2010.
23 North Dakota 2008 test year revenue requirement
24 includes \$438,427 associated with these particular
25 emission reduction projects."

1 Q. Okay. I'm not sure if I'm
2 misunderstanding something, but I thought the
3 company was proposing to charge North Dakota
4 ratepayers over -- like 438,000 in mercury control
5 costs in this case. That seems inconsistent with
6 deferring the cost.

7 A. I'm not all that versed in the deferred
8 cost mechanism.

9 Q. So you're not familiar with that?

10 A. I'm on the periphery of that, yes.

11 Q. As I understand the paragraph you read,
12 that the program is not in place at this point, it
13 is future?

14 A. That is correct. As my testimony says,
15 the mercury controls are not required under the
16 Clean Air Mercury Rule prior to its vacatur. They
17 were supposed to be in place by the end of 2010 --
18 I'm sorry -- by 2010.

19 Q. If it's not in place now, and assuming
20 that, you know, I'm correct that there's an attempt
21 to impose \$438,000 based upon that, does that seem
22 appropriate when no one is receiving the benefit of
23 this future program to date?

24 MR. BRADLEY: Lack of foundation. He's
25 not asked him to identify what's included in the

1 \$438,000.

2 Q. (MR. BAHR CONTINUING) Would you please do
3 so?

4 JUDGE WAHL: Just a minute. I'm not sure
5 I understand the objection, Mr. Bradley.

6 MR. BRADLEY: Your Honor, he's asked him
7 whether or not there's any benefit and he's assumed
8 that it relates to a mercury control issue without
9 finding out if \$438,000 is a mercury control
10 payment -- or cost.

11 JUDGE WAHL: All right. Then I
12 misunderstood his testimony because I thought
13 that's what the question was. Mr. Bahr.

14 Q. (MR. BAHR CONTINUING) And that's what I
15 understood, too, that this is a -- \$438,427 in
16 mercury control cost. Is that inaccurate?

17 A. It says particular emissions reduction
18 projects. The actual detailed breakdown consists
19 of \$12,335 for mercury monitoring. That was
20 required by both the Clean Air Mercury Rule and
21 Minnesota Mercury Emission Reduction Act.
22 Minnesota did require that 18 months prior to the
23 Clean Air Mercury Rule, that that had to begin
24 monitoring on July 1st, 2007. Clean Air Mercury
25 Rule did not require that until the beginning of

1 2009. The other costs included in there were --

2 JUDGE WAHL: Let me just interrupt,
3 please. Have we resolved the objection now, Mr.
4 Bradley?

5 MR. BRADLEY: He's --

6 JUDGE WAHL: Are we getting there?

7 MR. BRADLEY: He's provided the
8 information which will advise counsel to ask a
9 different question, I believe.

10 JUDGE WAHL: So I understand. All right.
11 Then proceed.

12 THE WITNESS: Okay. The remaining costs
13 within that total were approximately \$200,000 in
14 oxidizing nitrogen reduction equipment at the
15 Sherco unit 1 and 2 plants, approximately \$1,000 in
16 engineering work for mercury sorbent injection
17 systems for Sherco unit 3 and the King plant, and
18 an additional approximately \$225,000 in chemical
19 sorbents or reagents to be used at the King plant
20 for removal of sulfur dioxide and reduce oxidizing
21 nitrogen.

22 Q. (MR. BAHR CONTINUING) Okay. So have each
23 of these expenditures already occurred?

24 A. The particular expenditures listed have
25 occurred, but only those associated with mercury as

1 I identified specifically apply to mercury.

2 Q. I'm just trying to make sure that this
3 isn't a future cost for a future program. This is
4 an actual cost that has been incurred already?

5 A. Correct. These are actual costs incurred
6 already.

7 MR. BAHR: I have no further questions.

8 JUDGE WAHL: Commissioners have questions?

9 COMMISSIONER WEFALD: I have no questions
10 for this witness.

11 JUDGE WAHL: Commissioner Clark?

12 COMMISSIONER CLARK: I have none. Thank
13 you.

14 JUDGE WAHL: Commissioner Cramer?

15 COMMISSIONER CRAMER: I have none.

16 Thanks.

17 JUDGE WAHL: All right. Followup, Mr.
18 Bradley.

19 MR. BRADLEY: Just one or two.

20 **REDIRECT EXAMINATION**

21 **BY MR. BRADLEY:**

22 Q. Mr. Rosvold, you had a discussion about
23 Exhibit CWK-1, which is page 2 of 2 attached to, I
24 believe, Mr. King's testimony, and I want to make
25 sure the record is clear because the phrase was

1 used which is a higher standard. Could you tell me
2 which standard is more restrictive, which would
3 limit the most amount of emissions?

4 A. The federal standard, the value for total
5 particulate, .015, is clearly a more stringent
6 standard than the Minnesota standard.

7 Q. I think you also had a question about
8 particulate matter. Are any of the Minnesota
9 standards more stringent than the federal
10 standards?

11 A. No, they are not.

12 Q. You had a discussion about whether the
13 federal standards would have applied to the King
14 plant, and I believe you testified they did not
15 because you were reducing emissions. Was that your
16 testimony?

17 A. That is correct.

18 Q. Did Xcel Energy over-control the King
19 plant?

20 A. They did not -- or we did not, however you
21 want to say it. Once you touch the boiler
22 envelope, and that's what we would have to do to
23 rehabilitate that boiler by cutting out the bottom
24 and doing whatever else needed to be done, you are
25 now subject to that regulation and you have to

1 demonstrate that you either reduce your emissions
2 or that you go through the full new source review
3 process.

4 MR. BRADLEY: I have no further questions.

5 JUDGE WAHL: Followup, Mr. Bahr?

6 MR. BAHR: I have none.

7 JUDGE WAHL: Any followup questions from
8 the Commission?

9 COMMISSIONER WEFALD: No.

10 COMMISSIONER CLARK: No.

11 JUDGE WAHL: Thank you very much, Mr.
12 Rosvold. Are we back to Ms. Hertzler?

13 MS. HERTZLER: We are indeed, Your Honor.
14 We would call Stephen Beuning, and he is one of our
15 telephone witnesses.

16 JUDGE WAHL: And his name is pronounced
17 how?

18 MS. HERTZLER: Beuning.

19 JUDGE WAHL: Beuning.

20 COMMISSIONER WEFALD: And he is going to
21 be talking about?

22 MS. HERTZLER: MISO costs.

23 COMMISSIONER WEFALD: MISO costs. Okay.

24 JUDGE WAHL: Mr. Beuning, this is Al Wahl
25 at the North Dakota Public Service Commission

1 hearing. You have been called as a witness to
2 testify. As you are doubtless aware, your
3 testimony is required to be under oath and I'm
4 required by law to advise you regarding perjury
5 before administering the oath. Perjury is a false
6 statement of material fact which you do not believe
7 to be true; in other words, generally speaking, a
8 lie. In North Dakota perjury is a Class C felony,
9 punishable by a fine up to \$5,000, imprisonment for
10 a period of up to five years, or both.

11 **STEPHEN J. BEUNING,**

12 being first duly sworn, was examined and testified
13 as follows:

14 JUDGE WAHL: Ms. Hertzler.

15 MS. HERTZLER: Thank you, Your Honor.

16 **DIRECT EXAMINATION**

17 **BY MS. HERTZLER:**

18 Q. Mr. Beuning, could you please state your
19 name and title for the record, please?

20 A. My name is Stephen, with a p-h, J., or
21 Joel, Beuning, B-e-u-n-i-n-g. My title is director
22 of market operations at Xcel Energy.

23 Q. And did you submit testimony in this
24 proceeding?

25 A. Yes, I did.

1 Q. Do you have any corrections, additions or
2 edits to that testimony?

3 A. No, I don't.

4 MS. HERTZLER: Your Honor, I would like to
5 move what's been marked as Exhibit 12, which is the
6 direct testimony of Mr. Beuning.

7 JUDGE WAHL: Mr. Bahr?

8 MR. BAHR: No objection.

9 JUDGE WAHL: Exhibit 12 is received.

10 MS. HERTZLER: Mr. Beuning is available
11 for questions.

12 JUDGE WAHL: Mr. Bahr.

13 MR. BAHR: Staff advocacy have no
14 questions for Mr. Beuning.

15 JUDGE WAHL: Do the Commissioners have any
16 questions?

17 COMMISSIONER WEFALD: I do.

18 JUDGE WAHL: Commissioner Wefald.

19 **EXAMINATION**

20 **BY COMMISSIONER WEFALD:**

21 Q. Mr. Beuning, would you please just go
22 through for me the particular costs that are
23 covered under -- is it Chapter 16 and 17 --
24 Schedules 16 and 17 of the transmission and energy
25 markets tariff of MISO?

1 A. Certainly. I'll take them one at a time.
2 Schedule 16 is the administrative cost recovery
3 mechanism that MISO charges. They used it to
4 allocate the costs of administering, tracking,
5 doing analysis for grid simulations to support the
6 allocation of financial transmission rights. So
7 the fee for Schedule 16 is calculated on the basis
8 of -- I'll call them FTR hours, where FTR stands
9 for financial transmission rights, and a financial
10 transmission right is represented as a number of
11 megawatts from a source. So you take the number of
12 megawatts of FTRs times the number of hours that
13 you hold the FTRs, and MISO allocates the cost of
14 their staff and systems for administering FTRs into
15 the Schedule 16 rate and then they recover it on
16 that allocation basis.

17 Q. Does -- and that's Schedule 16?

18 A. Yes, that's correct.

19 Q. All right. And then will you go through
20 Schedule 17?

21 A. Okay. Schedule 17 is the charge that MISO
22 uses to recover the administration of their day-
23 ahead and realtime energy markets. So in a similar
24 fashion to the FTR in the sense that MISO takes the
25 cost of the staff and computer systems and software

1 associated with the market operation and market
2 administration and they allocate those costs out to
3 people on the basis of their generation injections
4 into the regional market and plus their load
5 withdrawals. So if your generation always matched
6 your load from resources inside the market, you'd
7 take twice your load times this rate and that would
8 give you your charges under Schedule 17.

9 Q. All right. And then also you're seeking
10 to recover MISO Schedule 10 and its related
11 component?

12 A. That's correct. Schedule 10 is what
13 recovers the basic costs of the MISO
14 infrastructure, their building, their staff, also
15 some of the functions that aren't market related,
16 but are handled on a regional basis, for example,
17 the reliability coordination function and also some
18 of their planning activities that fit into the
19 general overhead category, they stick those things
20 into Schedule 10. And the cost allocation for
21 Schedule 10 is slightly different than Schedule 16
22 and 17, but conceptually it's the same. The costs
23 for Schedule 10 are administered on kind of a -- on
24 approximated total annual energy served for each
25 load-serving entity.

1 Q. It's my understanding that if Xcel
2 Energy -- if the Commission does not allow these
3 costs, then how would you recover them?

4 A. I don't know. I'm not an expert on retail
5 rate design and recovery, so it's difficult for me
6 to answer that question, Commissioner.

7 Q. Did -- and Xcel Energy made a decision a
8 number of years ago to become a part of MISO; isn't
9 that correct?

10 A. Yes, that's correct.

11 Q. That's correct. And did you come to this
12 Commission at that time and did you seek -- seek
13 approval from this Commission for that decision?

14 A. My recollection is -- and I'm going just
15 off of a recollection here, and that's always risky
16 in my case, but if I recall, there was a filing
17 that we made for certain in Minnesota, I believe we
18 made it in each of our jurisdictions, relating to
19 our transfer of operational control of the grid
20 from our own transmission operation there into the
21 Midwest Independent System Operator.

22 Q. Mm-hmm.

23 A. I don't believe that we've ever had a
24 proceeding in North Dakota where we sought to
25 recover the costs prior to this one.

1 Q. No. But was Xcel required to become a
2 part of MISO by the federal government?

3 A. No, Commissioner. It's my understanding
4 that as part of our merger between Northern States
5 Power and New Century Energy, we accepted or made a
6 commitment that we would join an RTO as part of the
7 method of ensuring independence of our grid
8 operation. That was a voluntary initiative.

9 Q. Okay. Thank you for helping me remember
10 these different details that have happened over the
11 years. That's been very helpful.

12 On the -- how much do these costs -- how
13 much are these costs that we're talking about in
14 this particular section?

15 A. Surprisingly small. The North Dakota
16 share for Schedule 10 is \$466,000 for 2008-2009 and
17 for Schedules 16 plus 17 was \$522,300.

18 Q. 522,300 and?

19 A. 300 even.

20 Q. \$300,000?

21 A. Wait. I'm sorry.

22 Q. And that's for the -- that's the North
23 Dakota allocation from the year 2008?

24 A. Yes. Correct.

25 Q. Mm-hmm. Do you want to repeat those

1 numbers?

2 A. Yes, because I may have been chopped off
3 by the telephone there. The Schedule 10 number was
4 466,200. The Schedule 16 plus 17 number was
5 522,300.

6 Q. In your opinion, what benefits -- how does
7 MISO -- belonging to the MISO market, what do you
8 get for paying these dollars that you think
9 benefits your system?

10 A. I don't know if we have enough time in the
11 day to run through them all. Actually, let me use
12 an analogy that this is -- it's kind of like the
13 difference between driving on a dirt road and
14 having an interstate highway. In my testimony I
15 identified seven areas that generally are buckets,
16 if you want to characterize them that way, of
17 benefits. There's the overall more efficient
18 energy dispatch. Would you like me to list them,
19 Commissioner?

20 Q. Sure. Just in very short.

21 A. Okay. Also, more efficient use of and
22 more efficient access to transmission, reduce costs
23 for redispatch on the grid when there's an overload
24 or a need to reduce load on the transmission
25 element. Also, we've attained very efficient

1 benefits in the consolidation of contingency
2 reserve sharing among the utilities in the MISO
3 footprint that was made available through MISO
4 participation. We've obtained a great deal of
5 benefit in the integration of wind generation and
6 other renewable resources that have kind of
7 variable output into the MISO regional market as
8 opposed to going it alone as an individual
9 balancing utility. We've also got more broad
10 regional planning for the transmission grid, which
11 should result in more efficient transmission
12 investment decisions. And because the reliability
13 coordination services that MISO provides to the
14 region are provided with better tools than we used
15 to have in the past and over a broader footprint,
16 we've got a more functional reliability
17 coordination service provided by the regional
18 entity.

19 COMMISSIONER WEFALD: All right. That
20 answers my questions at this time. Thank you.

21 JUDGE WAHL: Any further questions from
22 the Commission? Commissioner Clark.

23 **EXAMINATION**

24 **BY COMMISSIONER CLARK:**

25 Q. Just a couple in following up on

1 Commissioner Wefald's last questions. In
2 retrospect, do you think MISO has been a very good
3 value to North Dakota ratepayers?

4 A. Yes. Yes, I do.

5 Q. Have you seen any studies that have
6 quantified the costs and benefits of MISO versus
7 what we used to get under the old MAPP system?

8 A. I never saw it characterized that way,
9 like MISO is better than MAPP, but I have seen it
10 characterized as an analysis by MISO, which I
11 included -- actually, it was -- I'm sorry. The
12 analysis was performed by a consultant at the
13 request of MISO, but it took a look at the regional
14 dispatch benefits under a coordinated market like
15 MISO offers. That type of coordinated market
16 wasn't ever provided to the MAPP region in the
17 past. I have that as a schedule to my testimony.

18 Q. The reason I ask is I know I've heard in
19 different proceedings and just in different venues
20 in front of the Commission a number of utilities
21 within North Dakota who are a little less cheery,
22 perhaps, about the costs and benefits of MISO.
23 I've heard some grumbling that really within the
24 MAPP region -- under the old MAPP region we were
25 operating basically as an RTO and the FERC had

1 particular vision of how it wanted to move forward.
2 Are there -- it seems to me there may have been a
3 GAO study or that Congress was poking around this
4 issue regarding trying to quantify the costs and
5 benefits of the current RTO scheme. Are you
6 familiar with any of those?

7 A. I had heard that there was some question
8 raised at the General Accounting Office at the
9 federal level in response to a question from a
10 Senator. I'm not familiar with whatever was
11 produced as a result of that question.

12 Q. Who looks over MISO's shoulder as far as
13 controlling its costs, administrative costs, and so
14 on and so forth?

15 A. Actually, there's quite a bit of
16 opportunity for that type of insight. For example,
17 one of my roles is to engage the regions where we
18 have operating companies and provide that type of
19 monitoring and interface on behalf of our company.
20 In addition to each of the load-serving entities
21 that participate in MISO having that opportunity,
22 there are stakeholder forums that permit direct
23 interaction with the board of directors at MISO.
24 The board of directors at MISO is an independent --
25 the directors are independent, they're not

1 affiliated with any of the utility participants, so
2 they're not characterizing the structure as a way
3 to build benefit for one entity or another. And,
4 lastly, the states, themselves, are engaged in the
5 Midwest ISO regional activities through the
6 Organization of MISO States, where there's an
7 opportunity for them to establish consensus on
8 policy positions and decisions about how the market
9 operates.

10 Can I go back, Commissioner, to part of
11 your question where you characterized the comments
12 of some other people saying that MAPP basically was
13 an RTO?

14 Q. Sure.

15 A. Because there's one aspect -- actually,
16 several aspects to that that I would like to
17 dispute. Each region as it operated prior to the
18 Midwest ISO, there was no opportunity for any of
19 the utility participants to obtain long-term firm
20 transmission service. So even though MAPP offered
21 a coordinated regional transmission tariff -- and,
22 frankly, they did a good job of it, they gave fast
23 answers to questions about could I get short-term
24 service. So what they did, MAPP did well, but they
25 shouldn't hurt their arm patting themselves on the

1 back because they definitely didn't fill the need
2 that was out there for coordinating long-term firm
3 transmission service or for providing efficient
4 congestion management to the participants in the
5 region in the form of a coordinated redispatch, and
6 those are functions that the Midwest ISO provides.
7 Now, if I site a generator in North Dakota on
8 transmission facilities that are part of the
9 Midwest ISO transmission tariff, I have the
10 assurance that I can get long-term firm
11 transmission service. So as a customer, somebody
12 who is potentially investing in new transmission --
13 or new generation facilities, I've got a lot more
14 certainty of service than I had in the old MAPP
15 world.

16 Q. You had mentioned in answer to my question
17 regarding who looks over MISO's shoulder a number
18 of different groups and, I think, ultimately the
19 MISO board of directors. Is FERC also there
20 looking over their shoulder?

21 A. Right.

22 Q. So any of these administrative costs have
23 to be approved by FERC ultimately; isn't that
24 correct?

25 A. Thank you for pointing out the elephant in

1 the room, but, yes, I neglected the most important
2 regulatory oversight element there.

3 COMMISSIONER CLARK: Okay. Thanks.

4 That's all I have.

5 JUDGE WAHL: Commissioner Cramer?

6 COMMISSIONER CRAMER: I don't have any.

7 JUDGE WAHL: Followup, Ms. Hertzler?

8 MS. HERTZLER: No further questions, Your
9 Honor.

10 JUDGE WAHL: Followup, Mr. Bahr?

11 MR. BAHR: No questions.

12 JUDGE WAHL: All right. Thank you very
13 much, Mr. Beuning. You may simply hang up the
14 phone. Ms. Hertzler.

15 MS. HERTZLER: Your Honor, when we had
16 submitted our order of witnesses, we had intended
17 to take Mr. Bomberger at this time. However, we
18 also thought, I guess less optimistically than we
19 should have, that we would be in Tuesday morning
20 when we would be taking up Mr. Bomberger. We have
21 not been able to get him to ascertain that he's
22 available at this time. We propose to skip him
23 until tomorrow morning and go to Walt Grivna, who
24 has submitted testimony related to transmission,
25 and then Commissioner Wefald's earlier question

1 related to transmission if it's related to the
2 project would be directed to Mr. Grivna -- as I
3 have been corrected, it related to the cost that
4 was in Mr. King's testimony, it would still be
5 directed to Ms. Heuer.

6 JUDGE WAHL: All right. Mr. Grivna, this
7 is Al Wahl at the North Dakota Public Service
8 Commission hearing and you have been called to
9 testify as a witness.

10 MR. GRIVNA: Okay.

11 JUDGE WAHL: As you may be aware, your
12 testimony is required to be under oath and I am
13 required by law to advise you regarding perjury
14 before administering the oath.

15 MR. GRIVNA: Okay.

16 JUDGE WAHL: Perjury is a false statement
17 of material fact which you do not believe to be
18 true; in other words, generally speaking, a lie.
19 In North Dakota perjury is a Class C felony,
20 punishable by a fine up to \$5,000, imprisonment for
21 a period of up to five years, or both.

22 **WALTER GRIVNA,**
23 being first duly sworn, was examined and testified
24 as follows:

25 JUDGE WAHL: Ms. Hertzler.

1 MS. HERTZLER: Thank you, Your Honor.

2 DIRECT EXAMINATION

3 BY MS. HERTZLER:

4 Q. Mr. Grivna, could you please state your
5 full name and title for the record?

6 JUDGE WAHL: Is your microphone on?

7 MS. HERTZLER: Thank you, Your Honor. My
8 apologies.

9 Q. (MS. HERTZLER CONTINUING) Mr. Grivna,
10 could you please state your full name and title for
11 the record?

12 A. My name is Walter Thorson Grivna, and my
13 title is manager of transmission reliability
14 assessment.

15 Q. Mr. Grivna, did you submit testimony in
16 this proceeding?

17 A. Yes, I did.

18 Q. Do you have any edits, corrections or
19 additions to that testimony?

20 A. No, I don't.

21 MS. HERTZLER: Your Honor, we have
22 previously marked Mr. Grivna's direct testimony as
23 Exhibit 14 and we would move its admission.

24 JUDGE WAHL: Mr. Bahr?

25 MR. BAHR: No objection.

1 JUDGE WAHL: Exhibit 14 is received.

2 MS. HERTZLER: Mr. Grivna is available for
3 questions.

4 JUDGE WAHL: Mr. Bahr?

5 MR. BAHR: Staff advocates have no
6 questions of Mr. Grivna.

7 JUDGE WAHL: Do the Commissioners have any
8 questions? Commissioner Wefald.

9 COMMISSIONER WEFALD: Yes.

10 **EXAMINATION**

11 **BY COMMISSIONER WEFALD:**

12 Q. And if you're not the correct person to
13 answer these questions, then if you can refer me to
14 the correct person. I'm looking at page 5 and 6
15 and 7 of your -- basically the whole listing of
16 your interconnection projects and your transmission
17 projects that you're submitting in this rate case,
18 and what I need to understand is -- I'm familiar
19 with cost allocation and how there's been a lot of
20 time spent at MISO about determining cost
21 allocation of transmission projects, and for
22 projects 345 kV and above, if they are considered
23 reliability projects and let's say they're below
24 345 and they're generation interconnection or
25 economic development projects. Have -- how are --

1 how have costs been allocated from these particular
2 projects and where would I find that information
3 and then -- so how do I know -- how do I know
4 exactly what cost allocation methodologies have
5 been put in place before you've allocated our share
6 to North Dakota in this rate case?

7 A. Right.

8 Q. Do you follow the question? And maybe
9 this is -- maybe all of these cases came in before
10 those allocations were set up by MISO of how
11 projects are allocated in cost across the whole
12 MISO system. Some reliability projects it said,
13 for example -- Jerry can help me here -- it was
14 like 20 percent goes to the region -- you know, for
15 a 345-kV line, that's considered a reliability
16 line, 20 percent of the costs go to the -- are for
17 the smaller region, the immediate region, and -- or
18 is it opposite? -- 80 percent go to the whole? No.
19 Okay. Tell me which it was again, because I
20 haven't looked at this for a while.

21 MR. LEIN: 20 percent are postage stamp.

22 COMMISSIONER WEFALD: Yes.

23 MR. LEIN: The other 80 are on the load
24 flow -- based on load flow.

25 Q. (COMMISSIONER WEFALD CONTINUING) Okay.

1 And 80 percent are load flow and 20 percent are
2 postage stamp, meaning they're allocated over the
3 whole region. So did these projects go through
4 that type of an allocation process and now you're
5 determining what portion of that 80 percent is
6 going to be North Dakota's cost allocation, or
7 what?

8 A. Okay. First off, there was only one 345
9 project in this listing and that was grandfathered
10 prior to any of the MISO MTEP allocations. And
11 others wouldn't have qualified for any of the
12 regional sharing. They were just local load
13 serving, again, allocated to the local load-serving
14 zone.

15 Q. So the rest -- all of these are 115 kV?

16 A. They're all --

17 Q. Well, there's another one, Minnesota/
18 Wisconsin 345-kV rebuild project.

19 A. Yeah, that's not a -- one that would be
20 allocated as a reliability need. That was a
21 condition rebuild.

22 Q. Okay. Why don't you just go through them
23 in your list and tell me how each one was allocated
24 in cost then. Sherburne County/St. Cloud project.

25 A. That one was just allocated to the local

1 load-serving zone. That's a 115 and transformer.

2 Q. That's a 115 even though it says 345-115?

3 A. That was the transformer, yeah. The
4 transformer was allocated with the load serving.

5 Q. All right. So this is a 115-kV line?

6 A. Right.

7 Q. All right.

8 A. Southeast Metro is a 115-kV line project,
9 be in Minneapolis, again, was not allocated.

10 Q. That was not. So when you say "not
11 allocated," what do you mean by that?

12 A. In other words, it just becomes part of
13 the total cost in the NSP rate zone. It doesn't
14 get cost shared into other rate zones.

15 Q. Okay. So what I'm curious about is,
16 because these projects are so far away from North
17 Dakota, what -- isn't it the farther away the line
18 for a small, like a 115-kV line it is from, let's
19 say, North Dakota, there's something about that you
20 -- you don't pay as much. So has all that been
21 taken into consideration? Because this -- the
22 115-kV project, for example, those are rather local
23 lines, and so how was the cost allocation done to
24 determine what portion of that should be paid by
25 North Dakota ratepayers versus the people who are

1 right there in the suburb of the Twin Cities?

2 A. It is my understanding it is just applied
3 to what is an NSP overall rate zone. North Dakota
4 is part of that same rate zone, so all costs are
5 just shared.

6 Q. Equally?

7 A. Equally is my understanding.

8 Q. Okay. Let's keep going and you can tell
9 me all the others, but that one is shared then
10 equally throughout the --

11 A. Throughout the NSP --

12 Q. -- the whole rate, which would encompass
13 North Dakota, South Dakota and Minneapolis --
14 Minnesota?

15 A. Right.

16 Q. The whole group pays the same amount -- I
17 mean, proportionally per customer, whatever, by
18 their usage the same amount?

19 A. That is my understanding, yes.

20 Q. Okay. Let's go to the Southeast Metro
21 project.

22 A. That was the one we just talked about.

23 Q. Okay. That's the one we just talked
24 about. Okay. Fine. Yep, I'm with you on that.

25 I'm sorry. Okay. The Minnesota/Wisconsin 345-kV

1 rebuild?

2 A. Right. Those are -- again, they are just
3 condition rebuilds, and that does not get any type
4 of special sharing within the MISO tariff. It goes
5 to the NSP rate zone.

6 Q. Okay. And that was \$11 million?

7 A. Right.

8 Q. So when you upgrade a line -- or just when
9 you say a rebuild, you're just basically doing
10 maintenance on it?

11 A. It was a form of capital maintenance.
12 They were replacing the poles that were in bad
13 shape, that type of maintenance.

14 Q. And what year was that one done?

15 A. I believe that was completed last year.

16 Q. 2007. All right. Go to the next one.

17 A. The next one is a 115-kV upgrade in Sioux
18 Falls, again, similar to the other.

19 Q. So that was equally again?

20 A. Right.

21 Q. What year was this one completed?

22 A. I'd have to -- I don't know off the top of
23 my head. It was a couple years ago.

24 Q. 2006, you're guessing?

25 A. I think it was either 2005 or 2006.

1 Q. All right. The Maple River-Red River
2 North Dakota project.

3 A. That one, again, is the same type of local
4 load serving 115 upgrade project. It would be
5 allocated among the whole rate zone.

6 Q. All right. Blue Lake Generator 7 and 8
7 interconnection project in Shakopee, Minnesota --

8 A. Shakopee.

9 Q. -- Shakopee, became operational in 2005,
10 and that was to add two combustion turbines?

11 A. That's correct.

12 Q. So isn't this considered like an economic
13 development -- economic project where you have --
14 the generators are causing the increase in new --
15 in new transmission?

16 A. They don't call that economic development,
17 but they would have followed the allocation that
18 occurred at that time under the MISO MTEP process
19 for new generators.

20 Q. Do you know what that allocation process
21 was at that time?

22 A. I believe it was a hundred percent paid by
23 the local load served zone at that time.

24 Q. And the local load served is the whole NSP
25 service territory?

1 A. That's correct.

2 Q. All right. And then the next one is the
3 Angus Anson Generator Number 4.

4 A. And that would be similar. That was down
5 in Sioux Falls, the same time frame.

6 Q. A hundred percent paid by local load
7 served?

8 A. Right.

9 Q. And then Faribault Energy Park
10 interconnection?

11 A. That one is a generator north of
12 Faribault. I don't remember the exact location on
13 that one.

14 Q. It's the same time period. Why would it
15 be different from the others?

16 A. There was a time frame where MISO added
17 their MTEP -- excuse me -- the RECB allocation for
18 new generator interconnection where they now
19 require the generator to provide 50 percent of the
20 network upgrade cost.

21 Q. Yes.

22 A. And it happened roughly in that time
23 period. I just don't remember on this particular
24 one.

25 Q. Okay. Can you check that out and submit

1 that to us as a late-filed exhibit?

2 A. Yes, we can.

3 JUDGE WAHL: All right. For the record,
4 that will be Exhibit 30 -- be Xcel Energy's Exhibit
5 30. The title of the exhibit will be, counsel?

6 MS. HERTZLER: Your Honor, I have it down
7 as the cost allocation of the Faribault Energy Park
8 Interconnection Project.

9 JUDGE WAHL: All right.

10 Q. (COMMISSIONER WEFALD CONTINUING) And then
11 the next one is the Mankato Energy Center
12 Interconnection Project.

13 A. Correct. And --

14 Q. That required upgrades to 345-kV, 115-kV
15 and 39-kV substation?

16 A. Right. And that one I do know the
17 generator paid 50 percent of the cost.

18 Q. And that one happened in 2006; is that
19 right?

20 A. That's correct.

21 Q. Okay. And that was under the MISO RECB
22 rules?

23 A. That's correct.

24 Q. All right. And then the High Bridge
25 generating station combined-cycle plant project.

1 A. That project is just expected to become on
2 line this year. I don't know the exact date on it
3 right now.

4 Q. It's expected to become operational in
5 2008 in your testimony. All right. And that
6 particular project, they must have worked out the
7 cost allocation then already. Is that also under
8 the MISO RECB?

9 A. It should be under the MISO RECB.

10 Q. But you don't know for sure?

11 A. I don't know for sure.

12 Q. Will you find that out and submit that in
13 that same late-filed exhibit?

14 A. Okay.

15 JUDGE WAHL: So this information will be
16 included, for the record, as part of late-filed
17 Exhibit 30.

18 Q. (COMMISSIONER WEFALD CONTINUING) Then the
19 last one is number 6, the Colville combustion --
20 oh, excuse me, that's not the last one. The
21 Colville combustion turbine plant interconnection
22 project.

23 A. Yes. And that one I do know had -- its
24 interconnection costs were covered under the RECB.

25 Q. Okay. So that's 50 percent paid by the

1 generator?

2 A. Of the interconnection portion of the
3 cost, that's correct.

4 Q. All right. So the 3.8 million is the part
5 that the generator did not cover; is that correct?

6 A. Correct.

7 Q. All right. And is the 18.7 on the
8 previous -- no -- on the 18.5 million on the number
9 4, Mankato Energy Center interconnection project,
10 that's the remainder after 50 percent was paid by
11 the generator?

12 A. That's correct.

13 Q. Okay. Then the wind support transmission
14 investments, the Southwest Minnesota 425-megawatt
15 project.

16 A. Right. That was a preRECB facility and
17 was grandfathered in and was paid a hundred percent
18 by the rate zone.

19 Q. So that one is \$81.5 million?

20 A. Correct.

21 Q. And this went in in what, in 2007?

22 A. The final pieces of it went in in 2007.

23 Q. All right. Tell me about the first
24 pieces.

25 A. It was a number of different transmission

1 line upgrades and new transmission facilities. For
2 example, this one for new transmission -- new
3 transmission facilities included a 161-kV line from
4 Fox Lake to Lakeville Junction in southern
5 Minnesota, which went in in 2000 -- excuse me --
6 2006. It also included some 115-kV to create the
7 Chanarambie collect -- wind collector station, this
8 would be out on Buffalo Ridge, and there were a
9 number of other 115- and 69-kV lines even that were
10 upgraded as part of this project.

11 Q. And this is the one that -- this is the
12 area that previous witnesses said had plenty of
13 transmission in the area and that's why they chose
14 to invest there for their wind development; isn't
15 that correct?

16 A. I didn't hear their testimony.

17 Q. All right. Well, I did. All right. And
18 then on Southwest Minnesota 825-megawatt project.

19 A. That also was a grandfathered project.

20 Q. And so that's preRECB?

21 A. Right.

22 Q. And that cost a hundred million dollars,
23 the new 345-kV line?

24 A. That's one -- the total project was 229 --

25 Q. 29 million dollars. And this is also to

1 connect wind projects in southwestern Minnesota?

2 A. That's correct.

3 Q. So in total, to connect wind projects in
4 southwestern Minnesota to customers of NSP, they've
5 had to pay a total of -- in the last few years of
6 81 million, plus \$229 million, which is a total of
7 over \$300 million; is that correct?

8 A. Yes.

9 Q. And a hundred percent of the costs, not --
10 not 50 percent, but a hundred percent of the costs
11 in both of these cases have to be paid for by the
12 ratepayers?

13 A. That's correct.

14 Q. Not the -- there's been no assumption of
15 any of these costs by the generators who caused
16 some of this investment?

17 A. No.

18 COMMISSIONER WEFALD: Okay. Thank you.

19 JUDGE WAHL: Any further questions?

20 Commissioner Clark.

21 **EXAMINATION**

22 **BY COMMISSIONER CLARK:**

23 Q. I do have one and I think it's following
24 along the same lines that Commissioner Wefald was
25 asking. To what degree has Xcel considered

1 spending money in North Dakota to upgrade
2 transmission facilities to bring on more wind in a
3 state that, by most independent analyses, has a
4 greater potential for wind development than the
5 areas that Xcel is investing in?

6 A. I believe others have already testified to
7 this, that we do have plans for transmission
8 associated with the CapX effort, which includes a
9 major 345-kV line to North Dakota. The main issue
10 with North Dakota is it requires some substantial
11 new transmission development, which takes time to
12 get developed and approved through the various --

13 Q. Right. But CapX 2020, as I understand, is
14 to support Minnesota load growth, so why does North
15 Dakota have to wait for wind projects to serve
16 North Dakota load to be contingent on getting this
17 transmission line in Minnesota built so that more
18 can be facilitated to the Twin Cities?

19 A. The CapX project is not just for Minnesota
20 load. The particular one to Fargo is also for
21 support of the Valley -- Red River Valley load
22 area. And, also, when this was first developed,
23 there was not the magnitude of wind expected at the
24 time these original decisions were made that's
25 being requested now. New facilities that are being

1 studied both now and along with the CapX
2 developments are now more focused on expanding the
3 region where the wind generation would be
4 developed, such as North Dakota.

5 Q. Let me ask, on page 11 of your testimony,
6 in the middle there's a question related to the
7 benefits that the transmission investments beyond
8 their support of additional wind generation have.
9 You indicate that the -- particularly the new
10 345-kV line mentioned above, which I guess is the
11 Southwest Minnesota project, begins to increase the
12 transmission capacity across the State of Minnesota
13 and will support the company's growing load in
14 North Dakota. Now, am I to read that as saying
15 then that the transmission investments in Minnesota
16 are being put in so that wind turbines in Minnesota
17 can support North Dakota's growing load, and if
18 it's true, then why wouldn't it make more sense to
19 have the transmission investment in North Dakota
20 and have those wind resources located closer to the
21 load considering that a good portion of Xcel's case
22 has been revolved around the notion that it makes
23 sense to build generation close for load?

24 A. Okay. Well, first off, that statement was
25 referring to the 345-kV line, not the wind turbines

1 that also benefit the use of the line. The main
2 issue is, if you look at a map of the Upper
3 Midwest, that there is very little high-capacity
4 transmission between Minnesota and either North
5 Dakota and South Dakota. To expand generation in
6 North Dakota and to input it into the system, it's
7 a case of -- what you have is a network -- it is
8 not like a pipeline -- and it's that generation
9 that takes all paths around the system to get to
10 the load. Because there's not high capacity
11 between a Minnesota system and where the load is,
12 that path of new generation in that area tends to
13 go north and south up through Canada and down the
14 500-kV line to the Twin Cities and down through
15 South Dakota and actually down into Nebraska and
16 loops around through Iowa and back up into the Twin
17 Cities. Both paths are pretty strained with other
18 uses. It will take a couple of new high-capacity
19 paths between the -- basically the source of most
20 of our generation, which is the Twin Cities area,
21 towards North Dakota and South Dakota to provide
22 for that ability to deliver that power more
23 directly and not go around on these other paths.

24 Q. I'm not sure if I understood the answer.
25 So does your testimony state that the transmission

1 investment that was needed to hook up the southwest
2 Minnesota wind projects were made to support
3 growing load in North Dakota?

4 A. No. What this is saying, it will also
5 help support growing load in North Dakota, but it
6 was not made directly for that purpose.

7 Q. How have so many other utility companies
8 been able to invest significant amounts in wind
9 generation in North Dakota by fitting them in in
10 portions of the grid and upgrading transmission
11 here and there when needed while Xcel has not
12 chosen that strategy -- particular strategy of
13 transmission investment?

14 A. Here again, what's occurring is they're
15 able to offset their own generation when they do
16 make that investment in North Dakota. Since NSP's
17 generation is outside of -- our sources of
18 generation are outside of North Dakota, we need to
19 have the paths to not create excess energy in North
20 Dakota while reduce our generation in, in our case,
21 the Twin Cities area, and without right now the
22 paths, what you are to do that is to go -- as I
23 said, to go up and around through Canada and down
24 and also down to Iowa. Both of those paths are
25 already totally utilized for other purposes. And

1 for them they can back down their generation in
2 North Dakota, which is to the west, and they don't
3 have that issue, where if we back it down in the
4 Twin Cities, that will increase the amount of flow
5 that you would want to loop around North Dakota.
6 The path would then be operated in an unsafe mode.

7 Q. Would it make sense to diversify the
8 geographic mix of Xcel's generation sources? Would
9 it decrease those problems that you're talking
10 about of having the strange load flows -- or
11 transmission flows?

12 A. Well, what you really need is to get --
13 there's only so much generation that can be
14 provided out of North Dakota with the amount of
15 transmission that leaves North Dakota.

16 Q. But wasn't that true of southwest
17 Minnesota before you started putting all this money
18 into transmission in Minnesota?

19 A. Yeah, that's correct. However, as I said,
20 it started out -- when this started out, it was not
21 viewed as the magnitude of wind generation that
22 they're talking about now. At the time they were
23 only talking about roughly at the 825 level that
24 was being developed, that was all that was being
25 expected to be developed.

1 COMMISSIONER CLARK: That's all I've got.

2 JUDGE WAHL: Commissioner Cramer.

3 **EXAMINATION**

4 **BY COMMISSIONER CRAMER:**

5 Q. I'll just ask one question and try to
6 avoid being argumentative. Has Xcel worked hard
7 enough at finding North Dakota generation and
8 transmission opportunities, or have we just simply
9 been dismissed because we're not Minnesota?

10 A. No, I would not say you have been
11 dismissed. It's a recognition that for NSP to be
12 able to utilize North Dakota's generation, it's
13 going to take one or two major 345-kV lines to
14 accomplish that. That's beginning now with the
15 CapX development.

16 COMMISSIONER CRAMER: That's all I have.

17 JUDGE WAHL: Any further questions?

18 Commissioner Wefald.

19 **FURTHER EXAMINATION**

20 **BY COMMISSIONER WEFALD:**

21 Q. Well, of the problems that you've
22 identified with the grid and exports from North
23 Dakota, wouldn't \$800 million of investment across
24 that constraint have made quite a bit of
25 difference? NSP put \$800 million into transmission

1 facilities to serve wind projects in southwestern
2 Minnesota in order to be able to solve a constraint
3 that was down there. Everyone talks about how you
4 couldn't possibly put any wind development in North
5 Dakota because there were constraints. What if
6 you'd put \$800 million worth of transmission
7 investment between -- to solve the constraint
8 problem between North Dakota and Minnesota in these
9 last six years, wouldn't that have solved that
10 constraint?

11 A. I think it's between 425 and 825.

12 Q. Excuse me. \$300 million. Excuse me. I'm
13 sorry. \$300 million. 300 million. I'm sorry. I
14 got the wrong number.

15 A. Estimates that are being talked about for
16 CapX ones are over a billion dollars.

17 Q. For the one line?

18 A. I think for just the one line. I don't
19 recall the exact cost of the individual lines. I
20 can find that out, but --

21 Q. The one line that's going to go from
22 Monticello to --

23 A. Monticello.

24 Q. -- Monticello to the Fargo area. Yep,
25 that would be great to add that to that late-filed

1 exhibit that I've already requested.

2 JUDGE WAHL: Well, I suggest,
3 Commissioner, let's make that Exhibit 31 --

4 COMMISSIONER WEFALD: Okay.

5 JUDGE WAHL: -- for the record. And this
6 is going to be the cost of the CapX line from
7 Monticello to Fargo or the Red River area? Help
8 me, counsel.

9 MS. HERTZLER: Your Honor, I believe it's
10 the Twin Cities-to-Fargo line is what we talked
11 about? Is it Monticello?

12 COMMISSIONER WEFALD: Monticello.

13 MS. HERTZLER: Yes, it goes into Fargo.

14 JUDGE WAHL: Okay. All right. Anything
15 further, Commissioner Wefald?

16 COMMISSIONER WEFALD: Not at this time.

17 JUDGE WAHL: Commissioner Cramer.

18 **FURTHER EXAMINATION**

19 **BY COMMISSIONER CRAMER:**

20 Q. I have a question with regard to the costs
21 and this better than 300 million. Are you familiar
22 with the regulatory process, maybe even the
23 regulatory and development climate of North Dakota
24 versus, say, Minnesota with regard to building
25 transmission? And could perhaps that \$300 million

1 go even further in a state like North Dakota where
2 the regulatory process is more friendly to
3 development?

4 A. I don't think it was -- in this particular
5 case that the costs were really driven
6 significantly by a regulatory climate. They're
7 pretty much the cost of building some direct lines.
8 There's a fairly positive climate in Minnesota for
9 wind development, also.

10 COMMISSIONER CRAMER: I have nothing
11 further.

12 JUDGE WAHL: Anything further from the
13 Commissioners? Followup, Ms. Hertzler?

14 MS. HERTZLER: No further questions, Your
15 Honor.

16 JUDGE WAHL: Followup, Mr. Bahr?

17 MR. BAHR: No questions.

18 JUDGE WAHL: Thank you very much, Mr.
19 Grivna. You may simply hang up the phone.

20 All right. We're almost on the hour of
21 five o'clock and I suggest we recess. Are we
22 continuing, Commissioners, to eight o'clock
23 tomorrow morning?

24 COMMISSIONER WEFALD: That's good.

25 COMMISSIONER CRAMER: That would be great.

1 JUDGE WAHL: Eight o'clock tomorrow
2 morning it is.

3 COMMISSIONER CRAMER: Seven o'clock is
4 out. Oh, yeah.

5 JUDGE WAHL: All right. We'll be in
6 recess until eight o'clock tomorrow, June 24.

7 (Recessed at 4:55 p.m., June 23, 2008.)

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