

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Montana-Dakota Utilities Co. :
Advance Determination of Prudence - : Case No.
88 MW Turbine Application : PU-11-395

Montana-Dakota Utilities Co. :
88 MW Combustion Turbine : Case No.
Public Convenience & Necessity : PU-11-396

TRANSCRIPT OF
CONSOLIDATED HEARING

Taken At
State Capitol
600 East Boulevard Avenue
Bismarck, North Dakota
January 10, 2012

BEFORE AL WAHL
-- ADMINISTRATIVE LAW JUDGE --

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COMMISSIONERS PRESENT:

COMMISSIONER TONY CLARK, Chairman
COMMISSIONER KEVIN CRAMER
COMMISSIONER BRIAN P. KALK

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COMMISSION ADVOCACY
STAFF.

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COMMISSION ADVISER.

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MDU EXHIBITS:

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101	Application for an Advance Determination of Prudence and a Certificate of PC&N for an 88 MW Simple Cycle Combustion Turbine	17	18
102	Certificate of Good Standing	17	18
103	Prefiled Testimony of Andrea L. Stomberg	17	18
104	Prefiled Initial Testimony of Alan L. Welte	17	18
105	Application Exhibit 10	17	18
106	Summary of Testimony of Darcy J. Neigum	17	18
107	Prefiled Initial Testimony of Darcy J. Neigum	17	18
108	Prefiled Initial Testimony of Robert C. Morman	17	18
109	Application Exhibit 2	17	18
110	Prefiled Rebuttal Testimony of Andrea L. Stomberg	17	18
111	Prefiled Rebuttal Testimony of Darcy J. Neigum	17	18
111	Prefiled Rebuttal Testimony of Darcy J. Neigum - Public Version	17	18
(DJN-1)	111 EPA Impact Analysis	17	18
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112	Corrected/Supplemental Rebuttal Testimony of Darcy J. Neigum	17	18

MDU LATE-FILED EXHIBITS

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C O N T E N T S (Continued)

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LATE-FILED EXHIBITS

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1 (The proceedings herein were had and made
2 of record, commencing at 9:03 a.m., Tuesday,
3 January 10, 2012, as follows:)

4 JUDGE WAHL: Good morning. I am Al Wahl,
5 the administrative law judge, pursuant to temporary
6 appointment designated by the Office of
7 Administrative Hearings upon the request of the
8 North Dakota Public Service Commission to serve as
9 the hearing officer for this consolidated hearing.

10 This is the consolidated hearing of the
11 separate applications of Montana-Dakota Utilities
12 Co. for an advance determination of prudence and
13 for a certificate of public convenience and
14 necessity to construct, own, and operate an 88
15 megawatt simple cycle combustion turbine. These
16 applications are North Dakota Public Service
17 Commission Cases No. PU-11-395 and PU-11-396,
18 respectively.

19 Before proceeding with this consolidated
20 hearing, I will ask the commissioners for their
21 comments and any directions for the hearing.
22 Commission President Tony Clark.

23 COMMISSIONER CLARK: Good morning to
24 everyone. Just note that I've appreciated having
25 the opportunity to read the prefiled testimony and

1 look forward to a good hearing here today.

2 JUDGE WAHL: Commissioner Kevin Cramer.

3 COMMISSIONER CRAMER: Thank you and good
4 morning. Same, by the way. Thank you for the very
5 timely prefiled testimony, rebuttal, as well, from
6 both parties. I appreciate that very much.

7 I guess with regard to direction, I might
8 just say a couple of things, and maybe it's
9 obvious, but a couple of the questions I want to
10 explore as much as anything is, does prudent mean
11 least cost. I think that's an important
12 distinction for me after reading the testimony.

13 Also, given sort of the somewhat
14 uniqueness of our ADP law, can a plant be prudent
15 without, you know, being necessary, without a PC&N.
16 And the reason I ask the question that way, of
17 course, is this part of the law that, you know,
18 makes prudence an ADP, I guess, gives the
19 rebuttable presumption to an ADP when built in the
20 state.

21 You've heard probably -- heard us say in
22 the past when we've had ADP cases in front of us,
23 plants outside -- or investment outside of the
24 state, that should we decide not to issue an ADP is
25 not an indictment, of course, on the prudence and

1 shouldn't be taken as such, although we've been
2 pressured into that many times by the company
3 saying but if not, it won't get built.

4 In this situation, clearly with the
5 rebuttable presumption and the burden being on the
6 advocates, you're proving -- you're going to try to
7 prove, it appears, that it is not prudent, and so
8 the ramifications of that are paramount in my mind.

9 So with that -- I mean, there are some
10 other issues, I think, that are pretty obvious that
11 I know you're going to dig into based on the
12 testimony at this point and I just look forward to
13 a thorough hearing.

14 JUDGE WAHL: Commissioner Brian Kalk.

15 COMMISSIONER KALK: Good morning. Just
16 look forward to hearing the testimony and the
17 question-answer phase. Thank you very much.

18 JUDGE WAHL: The record will show that it
19 is a little after 9:00 a.m., January 10, 2012, at
20 the hearing room of the North Dakota Public Service
21 Commission, Capitol Building, Bismarck, the time,
22 date and place duly noticed pursuant to and in
23 accordance with statute and rule for the
24 consolidated hearing of the applications of
25 Montana-Dakota Utilities Co. for an advance

1 determination of prudence and certificate of public
2 convenience and necessity to construct, own, and
3 operate an 88 megawatt simple cycle combustion
4 turbine.

5 The notice of consolidated hearing for
6 this hearing issued by the Commission dated October
7 26, 2011, specified the issues to be considered and
8 determined in each case upon this consolidated
9 hearing as, first, for the determination of
10 prudence of the construction of the facility,
11 whether the resource addition is prudent; and,
12 second, for the determination of the public
13 convenience and necessity, whether public
14 convenience and necessity will be served by the
15 construction, ownership and operation of the
16 facility and, 2, whether the applicant is fit,
17 willing and able to provide service.

18 Counsel, please state your appearance for
19 the record. Mr. Kuntz.

20 MR. KUNTZ: Thank you. Daniel S. Kuntz
21 for the applicant, Montana-Dakota Utilities Co.
22 Also with me is co-counsel Paul Sanderson with the
23 firm of Zuger Kirmis & Smith, and seated at the
24 table is our vice president, Andrea Stomberg.

25 JUDGE WAHL: Mr. Gruman.

1 MR. GRUMAN: Good morning. Mark Gruman
2 representing advocacy staff. Next to me is Richard
3 Hahn with La Capra Associates and also Chris Marohl
4 from advocacy staff and Mike Diller, as well, from
5 advocacy staff.

6 JUDGE WAHL: And Ms. Jeffcoat-Sacco.

7 MS. JEFFCOAT-SACCO: Illona
8 Jeffcoat-Sacco, general counsel with the
9 Commission, as adviser to the Commission. And also
10 with me is Patrick Fahn, director of compliance and
11 competitive markets for the Commission.

12 JUDGE WAHL: Let me add, please, that if
13 there is anyone present other than those persons
14 who will testify on behalf of Montana-Dakota or the
15 Commission advocacy staff, would address the
16 Commission regarding either or both of these cases,
17 I ask, please, that you talk to me during any
18 recess of the hearing to arrange to do that, not
19 that you need any permission from me to do that,
20 but that so I can assist you and advise you for
21 your testimony to the Commission.

22 That's true also if there happens to be
23 anybody listening to the Internet streaming who has
24 an interest in either of these or both of these
25 cases and would address the Commission later on in

1 the day, you're certainly welcome and, again, I
2 ask, please, that you talk to me during a recess of
3 the hearing to do that. If you have any documents,
4 photographs, other things which you would like to
5 have part of the record for the Commission to
6 consider, I will certainly be willing indeed,
7 please, to help you with that, get those marked as
8 exhibits and to get them made part of the record.

9 I'm expecting that the hearing will go
10 past the noonhour, but we will recess for lunch and
11 I will remain here to -- again for anybody who
12 might wish to address the Commission, and I'm
13 certainly willing to talk to you at that time.

14 With that, Mr. Kuntz, you may proceed.

15 MR. KUNTZ: Thank you, Your Honor.
16 Commissioners, before you are statements --
17 confidentiality statements. We are prepared to
18 hand out the exhibits -- or exhibit book that
19 includes the staff's testimony and exhibits, as
20 well. Some of those exhibits have confidential
21 trade secret information, the Commission has
22 already determined trade secret. Once you've
23 signed those statements -- I believe everybody else
24 in the room would have signed -- non-company
25 personnel would have signed the statement, then we

1 will hand out the exhibits and Mark and I will move
2 their admission. So if you can sign those and hand
3 them down to the judge.

4 JUDGE WAHL: And, Commissioners, while Mr.
5 Kuntz is distributing the exhibits, I have for your
6 advice -- the additional question is how to deal
7 with the audio record of the hearing. We have two
8 options. One would be to have a complete audio
9 record of the hearing, including trade secret
10 information, then if it's consistent with the
11 Commission's policy, that audio record would be
12 sealed as would the trade secret information
13 normally be sealed and would be available to the
14 public upon request and, of course, upon executing
15 the protective order.

16 Alternatively, in accordance with the
17 Commission's practice of making the audio record
18 available on the Internet, we would have to recess
19 the hearing for the trade secret -- for any
20 testimony regarding the trade secret information,
21 place a new card in the system, make a recording of
22 that portion, recess again to replace the card,
23 continue the rest of the record for the non-secret
24 information.

25 This can be done, but Mr. Kuntz advises me

1 that in the circumstances of this hearing, it's
2 likely that there will be repeated testimony
3 regarding trade secret information and it's going
4 to prolong the hearing. So if it's consistent with
5 the Commission's policy and with the wishes of the
6 Commissioners, I suggest that we simply continue
7 the audio recording, have it sealed as trade secret
8 information, and in place of the usual listing on
9 the Internet website for the record -- the audio
10 record of the hearing, simply say something to the
11 effect that the audio record contains trade secret
12 information. Please contact the Commission if you
13 wish to review the audio record.

14 So what is the wish -- Commissioner Clark,
15 what is the wish of the Commissioners?

16 COMMISSIONER CLARK: That's certainly
17 acceptable to me.

18 COMMISSIONER CRAMER: Oh, yeah.

19 COMMISSIONER CLARK: I think for
20 efficiency sake, it's probably the best way to
21 proceed.

22 COMMISSIONER KALK: That makes sense. The
23 only question I would ask, how are we going to work
24 with the live Internet feed --

25 JUDGE WAHL: No. That will be stopped.

1 The witnesses -- and let me just say this now. The
2 witnesses should be aware of when they need to
3 address -- talk about trade secret information,
4 just say that, I'm going to talk about trade secret
5 information, give me just a minute to stop the
6 Internet streaming, and then I guess you're going
7 to have to -- I may not be aware, but somehow you
8 should again signal to me that you've concluded
9 your testimony regarding any trade secret
10 information, again, give me half a second and
11 you'll see the red light go on and we'll be back on
12 the Internet.

13 All right. That will be our procedure
14 then. Mr. Kuntz.

15 MR. KUNTZ: Thank you, Your Honor. And at
16 this time I believe Mr. Gruman and myself have a
17 joint motion from myself. I would move the
18 foundation admission of Exhibits MDU 101 to 112.

19 JUDGE WAHL: Mr. Gruman.

20 MR. GRUMAN: Advocacy staff concurs. We
21 so stipulate.

22 JUDGE WAHL: And you're going to move
23 the -- why don't you at the same time move the
24 admission of your exhibits.

25 MR. GRUMAN: And at this time we motion to

1 submit all of our exhibits and we request a
2 stipulation for foundation and all other matters
3 from MDU.

4 JUDGE WAHL: Mr. Kuntz.

5 MR. KUNTZ: Agreed.

6 JUDGE WAHL: Yes. All right. For the
7 record, Exhibits MDU 101 through MDU 112 are each
8 received, and Commission Staff Advocacy Exhibits
9 RSH-1 through and including RSH-11 are each
10 received. Mr. Kuntz.

11 MR. KUNTZ: Thank you, Your Honor.

12 This is an application, as the Commission
13 knows, for an advance determination of prudence and
14 certificates of public convenience and necessity to
15 build an 88 megawatt simple cycle combustion
16 turbine for electric generation purposes. The
17 project would be built just north of Mandan on a
18 site with our Heskett Generation Station. The
19 project includes approximately a 24-mile, 10-inch
20 natural gas pipe which would be the fuel source for
21 this combustion turbine.

22 The capacity of MDU's existing electric
23 generation resources have been less than its peak
24 demand of its customers for a number of years.
25 That deficit has been met over the last several

1 years with power purchase agreements from other
2 utilities.

3 With the current power purchase agreement
4 set to expire in 2015 and with continued customer
5 growth, that deficit between our existing resources
6 and our demand is expected to be about 149
7 megawatts in 2015. That's about 25 percent of the
8 company's capacity needs.

9 In the course of planning to meet these
10 generation needs on the expiration of the current
11 power purchase agreement, the company issued a
12 request for proposals for generation resources in
13 2010. They then conducted least-cost resource
14 modeling using the responses from that request, as
15 well as self-built proposals -- alternatives.

16 The results of that planning effort
17 demonstrate a need for an addition of a combustion
18 turbine in 2015 primarily for capacity purposes.
19 That CT resources was reflected in the company's
20 2011 IRP, integrated resource plan, that was filed
21 with the Commission and then the company filed this
22 application for its ADP and the PC&N.

23 The staff does not disagree with the need
24 for the company to add generation resources in
25 2015. However, they suggest that a power purchase

1 agreement for a CT capacity resource in Illinois
2 would be a lesser cost alternative.

3 Under the MISO resource capacity construct
4 that's currently being considered by the Federal
5 Energy Regulatory Commission, the company is
6 doubtful that MDU could use this facility to meet
7 its generation resource needs, at least not without
8 incurring additional transportation costs that
9 weren't considered in the staff's analysis. The
10 PPA -- the Illinois PPA then would simply become
11 basically a financial hedge against MDU's capacity
12 deficit in purchasing capacity on the MISO annual
13 market as proposed by MISO.

14 Also, the staff's analysis does not
15 consider the locational benefits of an on-system
16 resource, which there are several, which will be
17 testified to by Ms. Stomberg and Mr. Neigum.

18 When the you consider the risks of the
19 Illinois power purchase agreement proposal and the
20 benefits of a self-built on-system resource, the 88
21 megawatt combustion turbine is not only the better
22 proposal, it's also the least-cost proposal in this
23 instance.

24 I would note, as Commissioner Cramer
25 noted, this proposal is for a North Dakota

1 resource, and the North Dakota ADP statute has some
2 special considerations for North Dakota resource.
3 Although MDU believes this is a prudent resource
4 addition under any analysis, the statute does
5 provide additional considerations for a North
6 Dakota resource. First is that it's a rebuttable
7 presumption of prudence. That means that the staff
8 has the burden of proving that the resource is not
9 prudent and, second of all, the Commission is
10 required to consider the benefits of locating the
11 resource in North Dakota. Ms. Stomberg will
12 discuss some of those benefits that only further
13 the case in support of this particular resource.

14 Montana-Dakota will be calling two
15 witnesses, Ms. Stomberg and Mr. Neigum, to provide
16 live testimony. In addition, prefiled testimony
17 was provided by Mr. Welte and Mr. Morman. Staff
18 has indicated they do not have any
19 cross-examination for those witnesses, so we will
20 not call them to summarize their prefiled
21 testimony, their prefiled testimony has been
22 stipulated, but both gentlemen are in the room and
23 available to answer questions if the Commission has
24 cross-examination questions for them, as well as we
25 have other resources available if questions come up

1 regarding any aspect of this project, hopefully,
2 that we will have someone here that can answer
3 those questions for the Commission.

4 With that, that completes my opening, Your
5 Honor.

6 JUDGE WAHL: Mr. Gruman, will you make an
7 opening statement at this time?

8 MR. GRUMAN: Just very briefly, Your
9 Honor. Thank you. Our direct will consist of
10 testimony from Richard Hahn, who will discuss the
11 issues so explained by Mr. Kuntz. We look forward
12 to a good hearing today. Thank you.

13 JUDGE WAHL: Ms. Jeffcoat-Sacco, do you
14 have an opening statement?

15 MS. JEFFCOAT-SACCO: No. Thank you.

16 JUDGE WAHL: Mr. Kuntz.

17 MR. KUNTZ: We would call Ms. Stomberg,
18 please.

19 JUDGE WAHL: Ms. Stomberg, as you know,
20 your testimony is required to be under oath and I'm
21 required by law to advise you regarding perjury
22 before administering the oath. Perjury is a false
23 statement of material fact which you do not believe
24 to be true. In North Dakota perjury is a Class C
25 felony, punishable by a fine up to \$5,000,

1 imprisonment for a period of up to five years, or
2 both. Will you raise your right hand, please?

3 **ANDREA L. STOMBERG,**

4 being first duly sworn, was examined and testified
5 as follows:

6 JUDGE WAHL: Mr. Kuntz.

7 MR. KUNTZ: Thank you, Your Honor.

8 **DIRECT EXAMINATION**

9 **BY MR. KUNTZ:**

10 Q. Would you please state your name?

11 A. Andrea Leigh Stomberg.

12 Q. Ms. Stomberg, you're employed by
13 Montana-Dakota Utilities Co.?

14 A. I am.

15 Q. And you prepared prefiled direct and
16 prefiled rebuttal testimony in this case?

17 A. I did.

18 Q. And that testimony contained a summary of
19 your work experience and responsibilities in your
20 position with Montana-Dakota?

21 A. It did.

22 Q. And do you have any corrections or
23 additions to that testimony at this time?

24 A. I do not.

25 Q. And if I asked you the questions that

1 appear in that direct and rebuttal testimony, your
2 responses today would be the same?

3 A. They would be.

4 Q. Could you provide the Commission with a
5 summary of your direct testimony at this point?

6 A. Certainly. And I'm going to go slowly.
7 I've practiced it slowly.

8 In my direct testimony for this request, I
9 introduced Montana-Dakota's proposal to construct
10 an 88 megawatt gas-fired combustion turbine, along
11 with transmission interconnection facilities and a
12 25-mile natural gas pipeline to provide fuel to the
13 turbine.

14 This turbine will be sited at the Heskett
15 Station north of Mandan, North Dakota, which allows
16 the company to utilize existing infrastructure and
17 staff and made this site the least-cost location of
18 the several possible locations studied.

19 Construction will begin in 2013, and the plant is
20 expected to be on line before summer peak in 2015.

21 Mr. Alan Welte's prefiled testimony
22 discussed the siting considerations as well as
23 turbine type selection.

24 During 2011 Montana-Dakota purchased about
25 20 percent of both our customers' energy and

1 capacity needs from the MISO market or other
2 entities. We have a forecast capacity deficit of
3 about 150 megawatts in 2015, when existing
4 contracts expire, and we are experiencing
5 significant growth particularly in western North
6 Dakota. This turbine will be added to our system
7 to provide capacity and will be used as a peaking
8 resource.

9 As described in Montana-Dakota's 2011
10 integrated resource plan submitted in May of 2011,
11 this turbine was selected after least-cost modeling
12 and consideration of other factors indicated it was
13 the best option to provide needed capacity to serve
14 load.

15 In evaluating ways to meet our capacity
16 need, Montana-Dakota issued a request for
17 proposals, evaluated many options and conducted
18 least-cost modeling as will be discussed by Mr.
19 Darcy Neigum. Montana-Dakota considered coal as
20 well as gas-fueled resources.

21 While coal generation can provide great
22 long-term value to customers, constructing new
23 coal, especially size to roughly meet our needs, is
24 cost prohibitive.

25 And while natural gas for many years was

1 considered a risky fuel based on pricing and supply
2 instability, Mr. Bob Morman's prefiled testimony
3 discussed the gas supply and pricing forecast, lead
4 us to believe that a gas-fired resource is the best
5 cost selection for this peaking facility.

6 This concludes my summary of my direct
7 testimony.

8 Q. And you also provided rebuttal testimony,
9 did you not?

10 A. I did.

11 Q. And at this time, Ms. Stomberg, could you
12 provide a summary of your rebuttal testimony for
13 the Commission?

14 A. Certainly. Montana-Dakota submitted
15 rebuttal testimony to this Commission in response
16 to Mr. Richard Hahn's testimony of December 12th.
17 Mr. Hahn suggested that Montana-Dakota's selection
18 of the 88 megawatt turbine should be rejected as
19 not being least cost.

20 Montana-Dakota does not select resources
21 on the basis of cost alone, nor does the advance
22 determination of prudence statute require that a
23 resource be least cost to be prudent.

24 As noted in our IRP filings,
25 Montana-Dakota seeks the best cost resource

1 considering the result of least-cost modeling,
2 expected impacts to customers, market availability
3 of energy and capacity, environmental regulations,
4 the company's existing mix of generation resources
5 and other factors that may be pertinent.

6 Qualitative factors and hard-to-quantify costs may
7 be an important -- may be important considerations.

8 In the case of the proposed combustion
9 turbine some of these other considerations include
10 the benefits of having a generating resource
11 located on the Montana-Dakota system within our
12 load area as opposed to remote from our service
13 territory.

14 For instance, having a generator at
15 Heskett enhances the reliability of our system,
16 will create two jobs at the plant and expected
17 income and property tax revenues of about \$700,000
18 annually and construction-related state and local
19 sales tax revenues of about \$2.9 million, as well
20 as the indirect revenue to the community from
21 ongoing purchases of materials and services to
22 support the facility. Clearly these benefits do
23 not accrue to our service area if the resource is
24 located in a remote state.

25 Further, an iron-in-the-ground resource in

1 our area will be useful to our customers for many
2 years. For instance, the Miles City turbine has
3 served our customers for almost 40 years, and we
4 are this year retiring two small turbines that have
5 been in service since 1953.

6 A purchase power contract has a finite
7 life and must be replaced at the end of its life at
8 an unknowable cost and availability.

9 While the idea of the Midwest Independent
10 System Operator, or MISO, is that the Upper Midwest
11 be looked at as a large electric system, as a
12 practical matter, local generation remains
13 important to serve local needs. This was
14 illustrated as recently as last month when an
15 outage of Montana-Dakota's two Heskett units
16 following a transformer failure left the electric
17 supply in the Bismarck-Mandan area somewhat
18 vulnerable in the event that another transmission
19 or supply interruption in the area occurred.

20 While we are developing multiple electric
21 feeds into the area to provide heightened
22 reliability, these feeds are not yet all in place.
23 During last month's event, we asked our customers
24 to reduce or reschedule their energy use. Had we
25 had the combustion turbine in place, we would have

1 been able to start it to support the community. In
2 the future, even when we have multiple feeds all in
3 service, a disruption to the backbone transmission
4 system could result in a need to run the turbine.

5 The location of this resource also offers
6 financial advantages from reduced transmission
7 costs that are not recognized in least-cost
8 modeling.

9 Mr. Neigum will further explain our
10 relationship with Western Area Power
11 Administration, or WAPA, and why having additional
12 generation capability at this location is expected
13 to reduce future costs for our customers.

14 There is another important consideration
15 selecting this type of resource at this location.
16 A frame unit of this size can be utilized with
17 other equipment and the existing Heskett Unit 1
18 turbine generator in a combined cycle configuration
19 to produce about 30 megawatts should the
20 58-year-old Unit 1 become uneconomic due to age or
21 environmental regulations. This would allow
22 Montana-Dakota to continue to use a largely
23 depreciated asset rather than abandoning it and
24 replacing it with new resources.

25 That concludes my summary.

1 MR. KUNTZ: Thank you, Ms. Stomberg. The
2 witness is available for cross-examination.

3 JUDGE WAHL: Mr. Gruman.

4 MR. GRUMAN: Thank you, Your Honor.

5 CROSS-EXAMINATION

6 BY MR. GRUMAN:

7 Q. Good morning.

8 A. Good morning.

9 Q. Do you have copies of your direct and your
10 rebuttal testimony in front of you?

11 A. I don't, but I can sure get it.

12 Q. Okay. Thank you.

13 A. Just one more thing up here. Now I do.

14 Q. Very good. Could you please turn to page
15 3 of your direct?

16 A. I'm there.

17 Q. Thank you. Lines 15 through 17, if you
18 could just read that very briefly.

19 A. 15 through 17 of page 3?

20 Q. Yep.

21 A. Of my direct? Okay. "During" --

22 Q. Of your direct. And just let me know when
23 you're ready. Oh, go ahead if you want to just
24 read it out loud or you can read it to yourself,
25 too.

1 A. Okay. I can -- "During 2010, Montana-
2 Dakota relied on the Midwest Independent System
3 Operator energy market for 15 percent of the retail
4 customers' energy requirements, and purchased
5 approximately 20 percent of the retail customers'
6 capacity resources from other entities." That's
7 actually through line 18.

8 Q. Thank you. If you could just proceed to
9 the next page, page 4. Now I would like you to
10 read lines 4 through 6, I guess the end of that
11 sentence.

12 A. 4 through 6 on page 4?

13 Q. Yep.

14 A. "Montana-Dakota asserts this level of
15 reliance on the market and others to provide
16 generation capacity to customers results in long
17 term price and reliability risks to customers."

18 Q. So my first question is -- as indicated on
19 page 3, 15 percent for energy and 20 percent for
20 capacity, in your opinion, is too high. Why do you
21 believe that those levels are too high? If you
22 could please explain that to the Commission.

23 A. Well, I don't think that they're
24 necessarily the perfect percentage that you're
25 aiming for, but I think -- particularly at this

1 point in time when we're looking at significant
2 changes in the MISO area market because of plant
3 closures -- expected plant closures in response to
4 environmental rules, a lot of uncertainty with the
5 continued operation of the coal-based resource in
6 MISO, that as we continue to rely on that, those
7 prices will continue to increase, though I have no
8 necessarily -- have no proof on that, but I think
9 the MISO study that was submitted hints at that.
10 So I do feel that any time you don't control your
11 own resources you're at risk at what the market is.
12 That's not to say we necessarily have to control
13 all our resources.

14 Q. And of course, indicated, as well, you're
15 talking about concerns towards reliance, long-term
16 price and reliability risks. Do you have anything
17 further to expand upon that reasoning --
18 substantiate that reasoning as far as long-term
19 reliability and price risks?

20 A. Well, long-term reliability, I think
21 you're almost always better off controlling your
22 own resources. Price risks, again, we -- in
23 general market prices go up, and I believe that
24 market prices are going to continue to go up both
25 for capacity. Capacity resources are going to

1 become scarcer and scarcer as plants are closed and
2 before additional generation can be built, and that
3 will drive pricing.

4 Q. Now, in the last few questions you
5 provided your conclusion or your reasoning behind
6 your statements. My question is, did the company
7 perform any studies or analyses to quantify that
8 risk?

9 A. No. Not that I am specifically aware of
10 studies or anything like that, no.

11 Q. If the company were to purchase capacity
12 at long-term fixed prices, what price risk would
13 the customers take under that situation?

14 A. They would have a price risk at the end of
15 that PPA.

16 Q. If you could please expand upon that.

17 A. Well, if you have a contract for 20 years
18 for a fixed price, you certainly know your prices
19 for 20 years and then you're on the market again.
20 If you've built your resource, for instance, you
21 built a CT, we've got some in service for almost 60
22 years, they are there, they depreciate, they
23 continue to add value at a known cost for their
24 life.

25 Q. Previously in your testimony you talk

1 about a 15 percent energy and a 20 percent
2 capacity. What levels would your company like to
3 see as far as reliance?

4 A. Well, the energy, of course, we purchase
5 on the MISO market when it is less expensive than
6 what we can generate ourselves, so I'm not sure
7 there's a right answer for that now that we have
8 the MISO market from which to get energy.

9 The capacity, you know, we've had capacity
10 contracts for a long time. When we lost the 66
11 megawatt contract with Antelope Valley, that was a
12 significant chunk of our capacity, when we were
13 unable to build Big Stone. You know, we continued
14 to look for capacity resources that we understood,
15 understood the pricing on them, and Big Stone, of
16 course, we would have owned. So I think we have
17 always sought to control the bulk of our capacity.

18 I cannot tell you that 12 and a half
19 percent or 15 percent or 20 percent is the right
20 answer. We spend a lot of time watching the
21 market, trying to understand what it's going to
22 look like, and that forms our level of comfort, I
23 suppose.

24 Q. Well, if you could help us as ratepayers,
25 I guess our question is, when you're watching the

1 market or what you were talking about, I mean, are
2 there any -- is there any analyses or anything
3 objective quantified as far as your reasoning
4 behind those decisions, or is it more gut instinct?
5 If you could please expand.

6 A. I think there's been a lot of analysis
7 very recently around the impact -- projected impact
8 of the EPA regulations on the coal base load
9 resource in this nation as a whole, and certainly
10 MISO did a fairly thorough analysis of what they
11 expected, and I think there's been several thousand
12 megawatts of coal retirements announced already in
13 the MISO area.

14 Have we gone out and conducted our own
15 study? No, we have not done that, but through
16 MISO, through EEI, through other trade
17 organizations, we certainly pay close attention to
18 those forecasts.

19 Q. And if you could help us, is there
20 anything specifically within the record that you're
21 aware of right now that points towards what you've
22 just discussed as far as analyses?

23 A. I believe the MISO study is in the record.

24 Q. Right.

25 A. I mean, I believe it is.

1 Q. Now, I guess moving on, if MDU builds this
2 proposed 88 megawatt CT, will the capital costs of
3 this asset be recovered from the customers?

4 A. They would be.

5 Q. So put another way, if you have a rate
6 base without the CT and then you have a new rate
7 base with the CT, there's going to be a higher rate
8 base; correct?

9 A. Correct.

10 Q. And as a result, will MDU earn a larger
11 return on this higher rate base?

12 A. A larger return? We will earn our
13 regulated -- or allowed return, I would assume.

14 Q. Which would be more if the CT weren't part
15 of the rate base; correct?

16 A. Which would be more if the CT were part?

17 Q. Were not.

18 A. Please restate your question. I'm not
19 sure I understand.

20 Q. You're going to receive more money if the
21 CT is included in the rate base; isn't that
22 correct?

23 A. We will receive earnings on that
24 investment, yes.

25 Q. So shareholders are going to benefit by

1 the building of this CT; is that correct?

2 A. I believe so.

3 Q. So let's compare this, the building of the
4 CT versus purchasing a PPA. Isn't it in fact that
5 the shareholders are going to make more money by
6 building the -- by MDU building the CT rather than
7 purchasing, for instance, the energy and capacity
8 from a PPA?

9 A. There would be earnings on that
10 investment, so I would say your statement is
11 correct.

12 Q. So does this provide an incentive for the
13 company to pick its own projects over purchases?

14 A. You know what, that doesn't enter into my
15 consideration. We look for the best cost resource
16 to reduce risk to our customers. The more we lean
17 on the market, the riskier it is for our customers
18 in terms of long-term pricing. When we build a
19 resource -- for instance, when we built the Miles
20 City turbine 40 years ago, that has continued to
21 serve our customers at a cost that depreciates over
22 time, it provides long-term known value to our
23 customers. I think that's a good thing for our
24 customers.

25 Q. But if I'm an investor, if I'm an equity

1 shareholder, I'm going to want your company to make
2 more money; correct?

3 A. Well, we are a publicly traded company.
4 That's what we do.

5 Q. It's one of your objectives to make more
6 money?

7 A. My objective is to serve my customers.
8 Our company's --

9 Q. I'll rephrase then. It's one of MDU's
10 objectives to make more money; correct?

11 A. Sure.

12 Q. Very good. Thank you. If you could now,
13 please, go to your rebuttal testimony on page 2.

14 A. Page 2, rebuttal. That's Exhibit 10 --

15 Q. 110.

16 A. Page which? I'm sorry.

17 Q. On page 2.

18 A. 2. Thank you. I'm there.

19 Q. Thank you. Just one moment. On page 2
20 could you please refer to lines 1 through 4.

21 A. Page 2, lines 1 through 4?

22 Q. Yep.

23 A. Starting, "No. Least cost is not a
24 requirement for issuing an advanced determination
25 of prudence or a certificate of public convenience

1 and necessity. Not all prudent resources are
2 necessarily least cost resources and vice versa.
3 Montana-Dakota seeks the best overall value for its
4 customers." I went into line 5.

5 Q. Thank you. Now, is it your position that
6 the Commission cannot examine the cost of
7 alternatives?

8 A. No, certainly not.

9 Q. Now, I believe it was indicated before, is
10 it your position that proposed resources that are
11 located within North Dakota are afforded a
12 rebuttable presumption of prudence? Is that your
13 understanding?

14 A. That's my understanding of the statute,
15 yes.

16 Q. Now, I guess -- from the ratepayers'
17 standpoint, I guess our question is, if there's an
18 out-of-state resource that was available, but at a
19 significantly lower cost than, for instance, a CT,
20 could that become a basis of rebutting the
21 presumption of this prudence?

22 A. If all the costs were included in that, I
23 think it could be. I'm not a lawyer. I haven't --
24 I don't know that we've tested that in this state.

25 Q. But you understand, I mean, that if there

1 were an out-of-state resource at a lower cost, that
2 technically it could be more prudent than, for
3 instance, this 88 megawatt CT?

4 A. If all the costs are included in the
5 analysis.

6 Q. Well, our question is, I guess, since --
7 since we've, you know, arrived at that conclusion,
8 at what threshold, how much of a least cost would
9 an out-of-state resource have to be to be able to
10 adequately rebut that presumption?

11 A. I don't know what your threshold would be.

12 Q. But at some level it would be acceptable
13 in that? You recognize that?

14 A. I recognize that there could be a
15 situation where an out-of-state resource, all
16 things considered, may be less costly than an
17 in-state one. I do also believe there are harder-
18 to-quantify or unquantifiable benefits that need to
19 be considered, and as -- that's our job as a
20 utility, is to understand all of that.

21 Q. Thank you. If you could please refer now
22 to page 7 of your rebuttal testimony.

23 A. I am there.

24 Q. Thank you. From about lines -- I don't
25 think you need to read this, but lines 7 through 20

1 you discuss the potential repowering of the Heskett
2 1 unit to a combined cycle-type scenario. Are you
3 familiar --

4 A. Let me read. I'm familiar with it, but
5 let me reread it right now.

6 Q. Certainly. Just let me know when you're
7 done.

8 A. Yep. Thank you.

9 Q. Yep. Thank you. Did the company analyze
10 this scenario in EGEAS?

11 A. No.

12 Q. What -- what assumptions were made about
13 the retirement of the Heskett 1 unit?

14 A. The assumption was made that we may have
15 to retire it at some point in time.

16 Q. Just one moment. I guess my next question
17 is, in EGEAS was the Heskett 1 unit soon to be
18 retired and, if so, when?

19 A. I do not believe it was, subject to check
20 with the people that did the modeling.

21 Q. Thank you. I guess our question is that,
22 how was the company aware of whether or not
23 repowering the Heskett 1 unit is better than
24 perhaps an entirely new combined cycle unit?

25 A. I don't know that we have specifically

1 done that. However, we have done some -- I believe
2 some preliminary engineering to analyze what the
3 cost would be to repower that. We have a large
4 chunk of what would be a combined cycle resource
5 there that is a significantly depreciated asset
6 that we could continue to use to the benefit of our
7 customers. And if you want more details on that,
8 I'm probably not the one to ask; Mr. Welte might be
9 a better bet for you.

10 MR. GRUMAN: Mr. Welte. Thank you. Just
11 one moment, Your Honor.

12 THE WITNESS: Could I --

13 MR. GRUMAN: Please.

14 THE WITNESS: And we have no intentions to
15 retire Unit 1 at any point in time in the
16 foreseeable future, so that is, we believe, a good
17 engineering option for us, but nothing that we are
18 penciling at this moment.

19 MR. GRUMAN: Very good. Thank you. I
20 have no further questions, Your Honor.

21 JUDGE WAHL: Ms. Jeffcoat-Sacco.

22 MS. JEFFCOAT-SACCO: My questions related
23 to the IRP modeling and the relationship to the
24 repowering, and so I think that may have been
25 discussed sufficiently unless we get another

1 witness up to talk about it. Thank you.

2 JUDGE WAHL: Questions from the
3 Commission. Commissioner Clark.

4 **EXAMINATION**

5 **BY COMMISSIONER CLARK:**

6 Q. Thank you for your testimony. And, again,
7 if there are witnesses who are better able to
8 answer some of these, feel free to reflect them.

9 Could you walk me through the
10 decisionmaking process, perhaps not so much with
11 regard to selecting a particular resource, but the
12 timing decision of whether to build or not build at
13 this particular point. In other words, to what
14 degree has MDU taken into consideration in its
15 modeling the value of waiting, whether that's a
16 reasonable option in maybe procuring through
17 purchases or through the market for some period of
18 time while more certainty is obtained versus the
19 value of building now and how that's modeled. I
20 know most resource planning models try to take into
21 consideration some sort of balancing or weighing of
22 the build versus wait decision.

23 A. So I understand your question to be how
24 did -- why did we analyze a self-build at this
25 point in time given the fact that there's some

1 uncertainty in the markets; is that correct?

2 Q. Correct. Or maybe even expanding upon it,
3 not just the idea of self-build, but why build now
4 as opposed to waiting for some period of time?

5 A. Okay. Sure. Well, as I had indicated,
6 with the expiration of -- I've said this so many
7 times on this stand. With the expiration of the
8 Antelope Valley contract, 66 megawatts was a
9 long-term contract, it was a great contract, we
10 liked it, we couldn't get Basin to extend it, and
11 the loss of the Big Stone II power plant -- we have
12 been looking for capacity for a long time, for many
13 years, and we've got roughly 20 percent of our
14 capacity at risk. We have three old, I'll admit
15 it, coal plants, we love them, they work well for
16 our customers, but we have to wonder about the
17 longevity of those plants, and so we're trying
18 to -- I guess in my mind the things I think about
19 is what do we build, when do we build it,
20 strategically how does that time with potential
21 retirements, what's the market for labor going to
22 be like, what is the cost of equipment going to be
23 like in the future, what are gas prices going to
24 do, what is capacity on pipelines going to do, how
25 do we leverage the perfect time to build anything,

1 and it's a pretty hard call to make.

2 But all of those things I mentioned go
3 into the equation. You go out for requests for
4 proposal to test the market, what's out there.
5 Well, we've got a lot of people that bid in wind,
6 we had wind/nuclear. That would have been cool,
7 but that just wasn't going to work. We had some
8 CTs, we had some combined cycles, we had some
9 expensive stuff, we had some less expensive stuff,
10 we had transmission problems and uncertainty, as
11 you know.

12 All these things came into play. We have
13 some reliability issues and some transmission
14 issues that are unique in this area that we know
15 we're going to have to address and that we know are
16 going to drive costs for our customers in the
17 future. So we looked at all these things. With
18 the passing of Utility MACT and CSAPR, even though
19 I know that's on administrative hold or whatever,
20 stay, right now, these big environmental rules, we
21 see that as people are going to comply with those,
22 including us, we're going to need equipment, we're
23 going to need labor, we're going to need a lot of
24 stuff. There's huge competition for these things.
25 As coal units close more and more gas turbines are

1 going to be constructed.

2 To hit this market a little bit before we
3 think it's going to get frenzied we think is a good
4 reason to think hard about building now, the same
5 thing as we heard with the Big Stone II AQCS --
6 same thing there. Are gas prices pretty low?
7 There is available capacity on pipelines to get
8 fuel to this resource now. That's a good thing and
9 it's not something we can always count on. So all
10 these things go into our thoughts. They're hard to
11 quantify some of them, but they're all there.

12 Q. And that's, I guess, what my question was.
13 Do they tend to be mostly a qualitative analysis
14 where you're analyzing a number of things, or is
15 there anywhere in the record you can point me to
16 where there was a -- kind of a quantified, as best
17 as possible, sort of statistical analysis of, you
18 know, here are different decision points as we move
19 along and different probabilities for what could
20 happen with regard to environmental regulations and
21 how that impacts these decisions about waiting or
22 building -- you know, waiting or building now?

23 A. We're not quite that granular. We've
24 known for many years we needed capacity. That's a
25 big, easy thing so you look -- a big, easy thing to

1 know and so you look at that. Do we do statistical
2 analysis of probabilities? I don't.

3 Q. Questions about the workings of the MISO
4 market move towards some sort of resource adequacy
5 construct, would be best addressed to you or later
6 to Darcy?

7 A. I would deeply appreciate it if you would
8 address those to Mr. Neigum.

9 Q. Got it.

10 COMMISSIONER CRAMER: The beauty of going
11 first.

12 Q. (COMMISSIONER CLARK CONTINUING) Could you
13 address a bit the issue of energy efficiency? Mr.
14 Hahn makes in his prefiled testimony some comments
15 with regard to EE and that the projections for what
16 EE might achieve over the next -- I don't remember
17 the exact time frame, maybe until 2030 or something
18 like that -- seemed awfully low for MDU, something
19 like .23 percent, which does seem low compared to
20 national averages or even regional ones that you
21 read about that. Could you talk a little bit about
22 that and why that number was used and if it is, in
23 your opinion, low ball or not?

24 A. Well, I'm certainly not an energy
25 efficiency expert, but I will say that I think

1 there's several things that have -- you know,
2 impact at least our company's emphasis on energy
3 efficiency. The state also -- I have not seen a
4 huge push towards energy efficiency in this state.
5 For instance, our building codes, I think, have
6 been somewhat controversial for many years in terms
7 of not being, as some people think, rigorous
8 enough. We have low energy costs. It's a great
9 thing. It's hard to get people to turn off their
10 lights when it's cheap to leave them on. It's hard
11 to get people to conserve when it is inexpensive
12 not to. That's not a reason to increase your
13 energy costs, however. The states around us have
14 had mandates and have done some social engineering
15 to try to push some of this stuff.

16 This is something our state has not chosen
17 to do and our customers don't seem to have a great
18 deal of interest in. However, I see more and more
19 swirly bulbs, and I guess I will more and more in
20 the future.

21 It's not that we're opposed to that, but,
22 you know, I think the message we've got from our
23 commissions is that they're not interested in us
24 having specific paying for -- charging our
25 customers for specific energy efficiency projects.

1 We do have some new DSM projects coming up, which
2 are good, they make sense and I think our customers
3 will like them.

4 Q. Okay. Thanks. Could you talk about gas
5 deliverability issues with regard to this proposed
6 plant, or is that better directed somewhere else?

7 A. Well, I could tell you what I know, and if
8 it's not enough, you can talk to Mr. Morman.

9 Q. Sure. If you could just discuss a little
10 bit about how -- the type of contract that MDU will
11 be entering into to assure gas deliverability and
12 how it relates to how this plant operates, maybe
13 especially as it interacts with the market and when
14 it may be called to start up, and so on and so
15 forth?

16 A. Well, I don't want to talk about -- it
17 would be called to serve our peaking load on days
18 when we need the peaking energy here. When we have
19 reliability needs, we would run it here. It would
20 not typically produce energy unless it was the
21 cheapest resource on the market at the time.

22 Q. Sure.

23 A. So it is a peaking resource, would be used
24 on hot days or in unusual circumstances in the
25 market. And my understanding -- and it's a very

1 high level summary, I understand that we can -- we
2 can contract with marketers who have firm capacity
3 on existing pipelines with a gas pressure that's
4 sufficient to serve this CT, its fairly high-
5 pressure needs, and we have a reservation fee that
6 we will pay that is about a quarter as expensive as
7 going out and getting firm capacity ourselves on
8 that. So we have a reservation fee we pay to
9 reserve our ability to use their firm capacity to
10 bring gas to us.

11 Q. Okay.

12 A. And if you need more than that, I would
13 suggest you talk to Mr. Morman.

14 Q. Okay. Thanks. And just remind me, the
15 timetable for build on this, how quickly do these
16 get built from groundbreaking?

17 A. We would start construction in 2013 and it
18 would be -- this would be available, I think, in
19 March of 2015 in time to get it ready for peak.

20 COMMISSIONER CLARK: Okay. Thanks.

21 That's all I have.

22 JUDGE WAHL: Commissioner Cramer.

23 COMMISSIONER CRAMER: Thank you.

24

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EXAMINATION

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BY COMMISSIONER CRAMER:

Q. Thank you, Andrea. Remind me, how often does the Miles City turbine run?

A. The Miles City turbine doesn't run that often. It ran quite a bit after the MISO market first got started because they were trying to figure out how it worked. It runs on peak.

Q. With regard to -- I'll get to this later. With regard to gas price -- let me back up. With regard to your testimony along the lines of capturing 20 years of benefit over 50 years being the advantage of steel in the ground, as you put it, versus a PPA, you talked about the risk associated with price after the 20 years. How do you calculate the volatility of gas and the risk that runs in terms of the fuel cost, because clearly this is a resource that, while assuming all things that we hear about shale and supply going forward are rosy, we also know the history of gas is very, very volatile. So how do you assure MDU customers of -- you know, that you've mitigated all the risk with regard to fuel price?

A. I would never say I would assure that we've mitigated all risk ever. Certainly there is

1 risk with any fuel price, be it coal, be it
2 uranium, be it natural gas, and I've been up here
3 before talking about natural gas as a risky fuel,
4 and it is, but we use it for peaking, use it for
5 relatively few years -- or hours a year, and we
6 look at the forward curves. We have smart
7 people -- we are in the gas business, we have smart
8 people that look at those forward curves and are
9 pretty comfortable in the foreseeable future that
10 we have reasonably priced and available resources.

11 Q. Okay. Did you consider -- did MDU
12 consider or look into partnering with other G & Ts
13 that are looking at a huge demand growth in the oil
14 patch to see if there was a piece of a larger
15 project that maybe would have made a different fuel
16 source, given the potential scale, some viability?

17 A. When you say fuel source --

18 Q. Like coal.

19 A. -- you're saying fuel type? Like coal.
20 Well, you know we've tried darn hard to partner
21 with others to build coal, hasn't worked out for
22 us. We've had three different attempts and it
23 hasn't worked out for us.

24 Q. No, but, I mean, I think you'd have to
25 admit that in the last -- even in the last year

1 demand has grown dramatically and potential demand
2 has created a real need that somebody is going to
3 have to meet. I'm just wondering how recent those
4 discussions may have been.

5 A. I have had no recent discussions with
6 regard to any coal units, no.

7 Q. There was, I noticed, in some of the
8 cross-examination a bit of a recurring theme, and
9 Commissioner Clark got to it, as well, and that is
10 the desire by the advocates and our staff in
11 general to have more concrete analysis as opposed
12 to what seems to be somewhat instinctive
13 decisionmaking with regard to resources. Does MDU
14 have a tendency to be a little more instinctive in
15 its investment decisions than perhaps other
16 utilities, or is that just -- are they just being
17 sort of a pain? You don't have to answer the
18 second part.

19 A. I wouldn't, I assure you, unless ordered
20 to.

21 Q. It's a recurring theme.

22 A. I haven't worked for another utility so I
23 can't really directly compare that. I certainly
24 talk to my brethren in the planning departments of
25 these utilities, and I think other commissions are

1 far harder to work with and they may -- you know,
2 their IRP planning processes may reflect what other
3 commissions demand that this Commission has not.
4 We submit our IRPs routinely and seek comment,
5 don't usually get a lot. So absent any direction
6 that our IRPs are light -- and I think our last IRP
7 was not light, I would not have wanted to drop that
8 one on my foot -- I think we do a fair amount of
9 analysis. But that said, at this point in time
10 there's not a lot of options available to us.

11 COMMISSIONER CRAMER: Well, I would admit,
12 and I'll close with this, you -- your utility and
13 others are in a bit of a damned-if-you-do,
14 damned-if-you-don't situation right now, and I
15 understand that and I think we all experience the
16 same sort of frustration. So I appreciate your
17 testimony.

18 JUDGE WAHL: Commissioner Kalk.

19 COMMISSIONER KALK: Thank you, Your Honor.

20 **EXAMINATION**

21 **BY COMMISSIONER KALK:**

22 Q. Thank you for your testimony, Andrea.

23 A. Mm-hmm.

24 Q. I would like to just go a little different
25 way on just a couple of questions. When you looked

1 at what you needed -- I know you talked about
2 peaking and some other things, but did you ever
3 consider, let's make a 200 megawatt gas plant and
4 sell it back into the market and find other
5 customers in the Northwest that need it and then
6 we'll sell this power off and as our needs grow,
7 we'll take it back, and I think -- that would have
8 been something I would have looked at. Did you
9 ever look at that completely going the other way?

10 A. Well, actually our IRP did say you should
11 build more.

12 Q. So why don't we build more?

13 A. Well, I mean, we could. There's a number
14 of reasons you might not want to do that. One is I
15 don't mind having a little bit on the market. I
16 think that does help some diversity -- provide our
17 customers some diversity of supply and pricing.

18 If we built, for instance, a 200 megawatt
19 gas plant, and I don't know what that would have
20 cost, to sell to the market, which is not our
21 business model -- our model is not as an IPP to
22 sell into the market -- you wouldn't typically be
23 able to sell gas into a primarily coal market.

24 Q. But help me back from -- and we
25 probably -- neither one of us were then working

1 where we're at now, but isn't that one of the
2 hallmarks, MDU overbuilt things back in the day and
3 for decades the customers benefited from the
4 overbuild in the '70s and '80s, perhaps?

5 A. Well, when you say "overbuild," I mean, we
6 did build -- to get an economy of scale of the coal
7 unit, you build large -- you have customers and,
8 yeah, we did have to grow into some of that, and
9 most companies have done that. It's smart to build
10 a little bit larger.

11 Q. Isn't there an economy of scale for gas
12 plants, though, too? I'm not up to speed.

13 A. There is an economy of scale. But let's
14 also talk about generation diversity and risk of
15 having a lot of generation on one shaft, as we call
16 it.

17 The largest amount of capacity we have in
18 any one resource is about a hundred megawatts.
19 That's about 20 percent of our installed capacity
20 or our demand, and that's fairly comfortable if you
21 have a long outage. These things do break and they
22 do take some time to fix. If you have 200
23 megawatts, for instance, on a single shaft, you're
24 at much greater risk of supply disruption,
25 disruption for your customers as you repair that or

1 if that's out of service. So that's one of the
2 things you look at when you talk about the size
3 that you need.

4 In terms of selling it into the market,
5 again, I'm not sure that you would have a big
6 market. In terms of moving it west, we don't have
7 the transmission capability of moving it into the
8 western interconnect. That would be very expensive
9 getting across that. So those are some of the
10 things we think about.

11 Q. Well, I just know -- I know intuitively, I
12 just think we should build things bigger sometimes,
13 especially in North Dakota, and the company is in a
14 situation now where, like you said, you're in a
15 tough spot, you've got limited resources what are
16 available. Is there somewhere -- maybe Darcy will
17 talk more about it -- where you could give some
18 more data that building 160 megawatts is not as
19 good as what you're doing, something that can show
20 that this is the right size, a little more data
21 behind it?

22 A. Well, one of the -- and I don't know that
23 we necessarily have that, I have to think about it
24 for a bit, but one of the other reasons to build
25 this particular size is it does work very well with

1 that Unit 1 potential repower.

2 Q. Okay.

3 A. And I see that as a huge -- I think it's a
4 very elegant thing to be able to do, is to continue
5 to use this old plant in a new configuration, to
6 continue to use that asset that our customers have
7 paid for.

8 Q. Do you know of any -- and this is someone
9 else probably, but the air quality or air permits
10 that would tick in, do they tick in more as this
11 plant gets bigger?

12 A. Oh, they certainly would.

13 Q. So it probably gets harder to get bigger
14 plants built because of the air permits?

15 A. It could be, especially where you site it.
16 Now, this is a location with the refinery there and
17 near these urban areas and with the hills around
18 there, that air permitting is likely to be complex.

19 Q. Okay. And I suppose, too, of course, if
20 the size of the plant changes, the size of the
21 delivery system coming into the plant would change
22 too?

23 A. Well, and the ability to put it onto our
24 existing transmission. The bigger it is, you might
25 need more transmission upgrades. We didn't study

1 that in detail.

2 Q. And one more time, what is the life cycle
3 do you think of this plant? I heard some numbers,
4 but I don't know if you answered for this
5 particular one.

6 A. What do you mean, life cycle?

7 Q. How many years? You said 40 years for
8 some like-type plants.

9 A. Oh, you know, I gave the example of the
10 Williston turbines. They've been in there almost
11 60 years. You take care of these things, they can
12 last a long, long time. What was our projected? I
13 don't know. At least 40 -- at least 40 years.

14 COMMISSIONER KALK: Okay. Thank you.
15 That was really all I had.

16 JUDGE WAHL: Commissioner Clark.

17 **FURTHER EXAMINATION**

18 **BY COMMISSIONER CLARK:**

19 Q. Can you just talk a little bit about what
20 would -- what would MDU's options be if the
21 Commission declined to endorse this particular
22 project? So if we say, ah, nah, the Heskett plant
23 doesn't look like it's that hot for us, so what's
24 plan B? Is it buy capacity from the market? Is it
25 look at long-term contracts? What's that next

1 step -- is it rolling brownouts? Give me a sense
2 of --

3 A. Well, we will try really hard not to have
4 rolling brownouts.

5 Q. Right.

6 A. That's not what we do. We would go back
7 to the market with another RFP and see what was out
8 there and probably get wind and CTs again. That's
9 what I would bet.

10 COMMISSIONER CLARK: Thanks.

11 JUDGE WAHL: Commissioner Cramer? Further
12 questions from the Commission? Followup, Mr.
13 Kuntz.

14 MR. KUNTZ: Thank you, Your Honor.

15 **REDIRECT EXAMINATION**

16 **BY MR. KUNTZ:**

17 Q. Ms. Stomberg, in some of the questioning
18 by staff there was a suggestion in the questions
19 that the company may have incentive to bias its
20 modeling in favor of owned resources rather than
21 power purchase agreements or contracts in order to
22 increase rate base and, therefore, increase the
23 number of dollars returned to shareholders. Do you
24 recall that questioning?

25 A. Yes, I do.

1 Q. Do each of those owned resources require a
2 corresponding investment by shareholders for that
3 return?

4 A. Certainly.

5 Q. You mentioned the Antelope Valley
6 arrangement. Was that a power purchase agreement
7 or was that an owned resource?

8 A. It was a -- I think that was a contract
9 that morphed over time and I'm not aware of the
10 early years, but that was a PPA.

11 Q. And how long did that arrangement stay in
12 place?

13 A. I think that was at least 20 years --

14 Q. And did the company seek to --

15 A. -- subject to check.

16 Q. Did Montana-Dakota seek to extend that
17 contract?

18 A. We certainly did.

19 Q. Were you successful in doing that?

20 A. No.

21 Q. So then how did -- what did the company do
22 then to replace that capacity when the Antelope
23 Valley contract expired?

24 A. Well, we -- certainly we started planning
25 to see if there were coal resources we could build,

1 for instance, the Big Stone II piece, some other
2 resources we were looking at, Gascoyne, but we went
3 out for an RFP.

4 Q. And how did you end up replacing that
5 capacity between the time that the Basin contract
6 expired until today?

7 A. Well, with the PPAs.

8 Q. And more than one PPA?

9 A. We've had several.

10 Q. And during that time frame did you also
11 look at a possible ownership scenario such as
12 combustion turbines?

13 A. Yeah.

14 Q. And you selected power purchase agreements
15 during those time periods? And then you also
16 mentioned demand control. Has the company looked
17 at demand control agreements recently?

18 A. Yes. In fact, we just inked a contract
19 for 25 megawatts of demand control resources to be
20 implemented over the next several years.

21 Q. And that's the contract with a third party
22 to provide those demand control resources; is that
23 correct?

24 A. Correct.

25 Q. And that will reduce, hopefully, the

1 amount of the investment the company will have to
2 make in a capacity resource if it works; correct?

3 A. Yes.

4 Q. And then you also, I believe, testified
5 that the company still expects to have some
6 reliance on the market for a piece of its capacity
7 in the near future. Is that also correct?

8 A. Yes.

9 Q. There was a question by Commissioner
10 Cramer regarding the fuel risks. Are there fuel
11 risks associated with a PPA?

12 A. There can be.

13 Q. For example, the Illinois proposal, what
14 was the nature of the fuel for that proposal, if
15 you recall?

16 A. That's gas.

17 Q. So the same fuel risks that would be
18 associated with this resource would be associated
19 with the Illinois resource?

20 A. Correct.

21 MR. KUNTZ: That's all the questions I
22 have.

23 JUDGE WAHL: Mr. Gruman?

24 MR. GRUMAN: No further questions, Your
25 Honor.

1 JUDGE WAHL: Ms. Jeffcoat-Sacco?

2 CROSS-EXAMINATION

3 BY MS. JEFFCOAT-SACCO:

4 Q. I have two. One is, if you're out in the
5 MISO market, the same fuel risk that you've just
6 been talking about with Mr. Kuntz would be
7 associated with the MISO market potentially; is
8 that correct?

9 A. Well, there's a real diversity of fuel
10 types that provide energy in the MISO market, coal,
11 nuclear, wind and gas, so I would say it's somewhat
12 mitigated.

13 Q. The second question, staff would
14 request -- unless it's here somewhere, just point
15 us to it. Would MDU be able to simply list for us
16 the factors considered that are not quantifiable --
17 that were not quantified in the IRP or anywhere
18 else?

19 A. Certainly we can do that. I mean, I think
20 it's there, but if you want us to pull it out and
21 clarify it, absolutely.

22 Q. I think we could use it pulled out in one
23 spot.

24 A. Okay.

25 MS. JEFFCOAT-SACCO: Thank you.

1 THE WITNESS: Mm-hmm.

2 JUDGE WAHL: Is this to be a late-filed
3 exhibit, Ms. Jeffcoat-Sacco?

4 MS. JEFFCOAT-SACCO: That would be fine.
5 They may have it today yet -- you know, later
6 today. It's possible, or not?

7 MR. KUNTZ: We can see if we can put
8 together a list. Like you said, I think a lot of
9 this stuff has been --

10 MS. JEFFCOAT-SACCO: That's okay.

11 MR. KUNTZ: -- discussed in the testimony,
12 but if you want kind of a list of things, we can
13 try to put that together in the course of the day
14 or, if not, file it tomorrow.

15 MS. JEFFCOAT-SACCO: Yes. What we -- we
16 want to be sure that we aren't missing something we
17 think was not quantified, you know, that we're
18 making a mistake and it is somewhere else. We
19 could make our own list, but we want to be sure
20 it's accurate, so we're asking MDU for the list.

21 MR. KUNTZ: We'll see what we can put
22 together.

23 JUDGE WAHL: All right. And, counsel, if
24 it's not prepared to be offered today or otherwise
25 at the close of hearing, then I will rely on

1 counsel to make a request for a late-filed exhibit.

2 MR. KUNTZ: That will be MDU 113, Your
3 Honor?

4 JUDGE WAHL: That's correct. Further
5 questions, Ms. Jeffcoat-Sacco?

6 MS. JEFFCOAT-SACCO: No. Thank you.

7 JUDGE WAHL: Followup from the Commission?
8 Anything further from the Commission?

9 Mr. Kuntz, followup?

10 MR. KUNTZ: No.

11 JUDGE WAHL: Mr. Gruman, followup?

12 MR. GRUMAN: No, Your Honor.

13 JUDGE WAHL: Thank you very much, Ms.
14 Stomberg. Mr. Kuntz.

15 MR. KUNTZ: We would call Darcy Neigum.
16 Your Honor, Mr. Neigum has got a fairly long
17 presentation, about 20-some slides. We can do some
18 preliminary stuff, then -- I'm not sure what you
19 want for a break, but maybe we want to take a break
20 so we don't have to interrupt that presentation.

21 JUDGE WAHL: It's a little early, but not
22 much, so let's be in recess for 10 minutes, Mr.
23 Kuntz.

24 MR. KUNTZ: That will be fine.

25 JUDGE WAHL: Ten minutes, until 20 after

1 ten o'clock.

2 (Recess taken.)

3 JUDGE WAHL: All right. We will resume.

4 Mr. Kuntz.

5 MR. KUNTZ: Thank you, Your Honor. We
6 call Mr. Neigum to the stand.

7 JUDGE WAHL: Mr. Neigum, as you know, your
8 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 North Dakota perjury is a Class C
13 felony, punishable by a fine up to \$5,000,
14 imprisonment for a period of up to five years, or
15 both. Will you raise your right hand, please?

16 **DARCY NEIGUM,**

17 being first duly sworn, was examined and testified
18 as follows:

19 JUDGE WAHL: Mr. Kuntz.

20 MR. KUNTZ: Thank you, Your Honor.

21 **DIRECT EXAMINATION**

22 **BY MR. KUNTZ:**

23 Q. Please state your name.

24 A. Darcy John Neigum.

25 Q. Mr. Neigum, you're employed by

1 Montana-Dakota Utilities Co.?

2 A. Yes.

3 Q. And you've prefiled initial, rebuttal and
4 corrected testimony -- prefiled testimony in this
5 case?

6 A. Yes.

7 MR. KUNTZ: And just for a reference, Mr.
8 Neigum's initial testimony is Exhibit 107, his
9 rebuttal testimony is Exhibit 112 -- or 111, and
10 his corrected testimony is Exhibit 112.

11 Q. (MR. KUNTZ CONTINUING) And do you have
12 any changes or corrections to that testimony, Mr.
13 Neigum?

14 A. I do have some changes.

15 Q. Can you give those to us at this time?

16 A. Sure. The first one is on page 24 of my
17 rebuttal, which is MDU Exhibit 111.

18 Q. That would be Exhibit 111?

19 A. Yes. And this would be at the end of line
20 19.

21 Q. Okay.

22 A. Page 24, the end of line 19, should also
23 include the following: Which would be subject to
24 securing a firm transmission service request from
25 MISO back to MDU.

1 Again, that would be at the end of line
2 19: Subject to securing a firm transmission
3 service request with MISO back to MDU.

4 Q. Any other corrections or additions?

5 A. I have one other, which is on page 28.

6 Q. Of the same?

7 A. Of the same.

8 Q. Okay.

9 A. And this would be a change to the trade
10 secret information.

11 JUDGE WAHL: Would you just wait, Mr.
12 Neigum, before proceeding. For persons listening
13 to the Internet stream, the Internet stream will be
14 interrupted as necessary to protect trade secret
15 information. The interruption may be only
16 momentary or may be as long as a few minutes. In
17 any case, as soon as the testimony regarding trade
18 secret information is presented, the Internet
19 stream will continue.

20 You may proceed, Mr. Neigum.

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MR. KUNTZ: That completes the trade
secret.

JUDGE WAHL: All right. You may continue,
Mr. Kuntz.

Q. (MR. KUNTZ CONTINUING) With those
corrections, Mr. Neigum, if I were to ask you the
questions that appear in Exhibits 107, 111 and 112,
would your answers be the same today as they appear
in your prefiled testimony?

A. Yes, they would.

Q. Then you've also prepared PowerPoint
slides that have been marked as Exhibit 106 that
summarize your prefiled testimony, have you not?

A. Correct.

MR. KUNTZ: And at this time, Your Honor,
I would ask Mr. Neigum to provide a summary of his
prefiled and rebuttal and corrected testimony using
the PowerPoint slides that have been marked as
Exhibit 106.

JUDGE WAHL: You may proceed, Mr. Neigum.

THE WITNESS: My summary presentation that
I have will talk about a number of points. One, it
will show the need that the company has for
capacity resources in the future. It will also

1 describe the evaluation process that the company
2 used to determine our future resource plan. I'll
3 also discuss some of the critique that Mr. Richard
4 Hahn had regarding Montana-Dakota's modeling
5 process and explain why his comments do not change
6 the selection of the 88 megawatt combustion turbine
7 resource. I'll also discuss in detail the
8 differences between the Illinois combustion turbine
9 proposal and the company's 88 megawatt combustion
10 turbine resource and explain why the Illinois
11 proposal is not a viable and least-cost proposal,
12 and then I'll also spend just a little bit of time
13 discussing the effects of the expiration of the
14 WAPA transmission service agreement on December
15 31st of 2015.

16 Montana-Dakota has a need, as we talked
17 about, for both capacity and energy resources.
18 That's largely driven by our needs today plus,
19 also, the forecast that we have for growth for both
20 capacity and on the energy side.

21 In our most recent system forecast that we
22 put together, the five-year average sales growth is
23 projected to be 3.5 percent annually for the next
24 five years, and the demand growth is forecasted to
25 be 2 and a half percent over the same period on an

1 annual basis.

2 With the potential for increased customer
3 growth in the Bakken formation, we may see these
4 levels of growth be even higher or continue at
5 those levels for an extended period of time. Also
6 noting this past summer we did set an all-time
7 summer peak of 535 megawatts, which was set on July
8 29th. If you would compare that peak level versus
9 our forecast that we had in the 2011 integrated
10 resource plan, that's basically the level of demand
11 that we were forecasting to see in 2013.

12 Our capacity need, as we've talked about,
13 in 2015 is projecting a deficit of roughly 149
14 megawatts or, in MISO's terms, their planning
15 resource credits, or PRCs. This accounts for about
16 25 percent of all our capacity requirements.

17 This is driven by a number of factors.
18 The growth that we've talked about, the expiration
19 of the current capacity purchase agreement that we
20 have with We Energies, which expires in May of
21 2015. Going back to the expiration of the Antelope
22 Valley, 66 megawatt capacity in energy purchase
23 agreement that the company benefited from for a
24 number of years expired in November of 2006. As
25 we've talked about, we've been replacing that with

1 purchased capacity every since. And the last major
2 capacity resource addition that the company has
3 made is the Glendive Unit II, which was completed
4 in 2003. That also is a gas turbine resource.

5 This is a graph from our integrated
6 resource plan that basically shows at the time of
7 the plan what we were looking at as far as customer
8 load, which ends up being the quantities in blue as
9 we see increasing, and then also the company's
10 capacity resources that either we owned or had
11 contracted.

12 We end up seeing in 2014 that basically we
13 end up with the deficits created in 2015 for the
14 summer season driven by the expiration of the We
15 Energies' purchase capacity agreement.

16 As part of our analysis that we had in the
17 2011 integrated resource plan, we went out for
18 request for proposals looking at other alternatives
19 that were available from others and in the market.
20 This process was started in June of 2010, largely
21 completed and analyzed through the fall of 2010,
22 and the bids that were part of that were valid
23 through the end of December of 2010.

24 As part of that request for proposal, the
25 company did a solicitation for all resources

1 beginning in June of 2015, so it wasn't just
2 limited to a fuel type. We also did solicit demand
3 response conservation-type programs.

4 From that we received a total of eight
5 responses to that. Three of those were for wind
6 resources, one was a combination of a wind and a
7 nuclear resource. We received proposals from two
8 bidders for combustion turbine resources, either
9 being of the simple cycle combustion turbine type
10 of format or a combined cycle combustion turbine
11 format. We also had one entity that bid their
12 wholesale tariff rate to us, and we also did
13 receive a response for one demand response program.

14 As a part of the screening that we
15 initially did on those proposals, we ended up
16 having three of them that were shown to be
17 potentials for least cost. The demand response
18 program, itself, we ended up signing a contract
19 with a third party as far as the implementation of
20 that program, and I'll talk in detail a little more
21 as far as on the North Dakota wind proposal that we
22 received and also a proposal for an Illinois
23 combustion turbine proposal, why we considered
24 those to not be viable and had concerns as far as
25 what the risks that were associated with them.

1 One of the things we've noted as far as in
2 this request for proposal and also the prior one
3 that we had to it is the level of uncertainty that
4 exists particularly from our neighboring utilities
5 regarding their availability of excess capacity
6 that they may have of sources and at least their
7 inability to really be able to offer those or bid
8 those to us as far as potential resources in the
9 future.

10 Some of the alternatives that we
11 considered as far as self-built options included a
12 43 megawatt and an 88 megawatt combustion turbine
13 resource, a combined cycle combustion turbine
14 resource of 140 megawatts in size. We looked at
15 wind generation with production tax credits and
16 without production tax credits after 2012. We also
17 looked at a generic coal-fired generation option.
18 We had our own company demand response and energy
19 efficiency programs. And then also a part of the
20 analysis that we had at the timing of the 2011
21 integrated resource plan was the Big Stone air
22 quality control system equipment as a modeled
23 option. So this is the one we had modeled
24 basically at the retirement of the existing Big
25 Stone plant, and the model basically had to choose

1 the addition of the additional air control
2 equipment as far as being viables compared to other
3 options that were available.

4 From the outcome of our 2011 integrated
5 resource plan, we had a number of actions that were
6 part of our two-year action plan. One of those was
7 to pursue the Big Stone air quality control
8 project. The other one was to enter into contract
9 negotiations on a 25 megawatt commercial and
10 industrial demand response program. We have signed
11 that agreement. And also is the construction of an
12 88 megawatt combustion turbine resource to be
13 located at Heskett Station.

14 Now, that doesn't get us all the way to
15 fulfilling our needs for our 149 megawatts. In the
16 short term we do have the ability to either
17 purchase capacity from the MISO capacity auction or
18 through bilateral agreements at least on a
19 short-term basis that we feel are available.

20 The other one that we're looking at doing
21 as far as to look out for the deficit that we're
22 still seeing beyond 2015 and beyond is the issuance
23 of another request for proposals in 2012.

24 Mr. Richard Hahn had a few comments that
25 he had made regarding some of our modeling

1 assumptions that were part of the modeling that we
2 did that used our resource expansion planning
3 model, which we end up calling EGEAS as far as an
4 acronym. One of those dealt with the treatment as
5 far as the allowance for funding used during
6 construction.

7 One of the comments that was in there was
8 we didn't include that for self-build, and that
9 ends up being true when we looked at the 88
10 megawatt resource, and it was an oversight. Our
11 practice is that basically the prices that we put
12 in the model as resources available include AFUDC.
13 That way the model doesn't have to do cash flows
14 and take other sorts of financing additions that it
15 makes to those costs.

16 On the particular one for the resource for
17 the 88 megawatt, we had done a separate build-up
18 for that over and overlooked that it was missing
19 AFUDC in that build-up, and so when we ended up
20 putting that number in the model, it didn't include
21 AFUDC just for that particular resource.

22 Another issue that was pointed out was the
23 incremental cost for combined cycle resource. The
24 way we ended up modeling a combined cycle resource
25 is that it was modeled at a total of 140 megawatts

1 in size. In order to have a combined cycle
2 resource you need to have a simple cycle gas
3 turbine, so something ends up supplying the heat
4 that you can then use as part of a heat recovery
5 boiler and a steam turbine. So the 140 megawatt
6 resource is really combined with the potential heat
7 or heat source you get from the 88 megawatt
8 combustion turbine resource.

9 When we developed the model as far as how
10 this was picked, there's two different resources.
11 One is the simple cycle resource, and then if
12 that's selected, the model can basically choose to
13 add the combined cycle to that resource either at
14 the same point in time or at a future point in
15 time.

16 And we developed the costs for that
17 incremental -- it was a part of our 2009 integrated
18 resource plan, and when we ended up creating the
19 2011, we used a lot of basis that we had in the
20 2009 IRP. This particular one we didn't change the
21 pricing to reflect the increased cost for the 88
22 megawatt resource. And so one of the issues we had
23 with this particular one, it was -- in a sense it
24 understated -- or actually the way the model was
25 set, it overstated the cost of what a combined

1 cycle resource would be.

2 For this particular point we went back and
3 basically made an adjustment to the model based
4 upon Mr. Hahn's concern. It didn't change any of
5 the outcomes or selections of resources in the
6 resource plan.

7 One of the other questions was the number
8 of available combined cycle resources. In the
9 model we included the optionality of having one
10 combined cycle resource, and because the model
11 doesn't pick more than one, we didn't put in more
12 than one. And one of the reasons for doing that
13 is, the more options you put in the model, it
14 basically causes it more time to basically do its
15 analysis because it has to then basically look at
16 do I add one, do I add two, all the additional
17 resources every time it goes through every planning
18 year. So it basically cuts down the number of
19 model iteration and the run time, has no effect as
20 far as on the outcome of what the model was.

21 One of the other comments was around the
22 cost of self-build wind, and Mr. Hahn suggested
23 that we should have used a number closer to \$1,750
24 per kW as far as the installed cost of wind. We
25 ended up using a number that was closer to what our

1 experience has been with some of our recently
2 completed projects.

3 The \$1,750 per-kilowatt number is probably
4 closer as far as in today's dollars, but I don't
5 think it's a reflection of what the long-term cost
6 is. Demand is suppressed today based upon there's
7 fewer projects being built because of the
8 uncertainty of the production tax credits, and
9 there also is a surplus amount of turbines that are
10 available that folks have purchased or secured that
11 they basically have in the market.

12 Another one was the comment around the
13 expiration of the federal production tax credits.
14 In that one we had assumed the production tax
15 credits would expire at the end of 2012, as they're
16 currently slated to do. There is a possibility
17 those could be extended. We didn't model that. If
18 we take a look at what's known and measurable,
19 they're set to expire. We would end up -- if they
20 were extended, it would probably be at a lower
21 funding level than what currently is there.

22 One of the other points in our modeling
23 that Mr. Hahn pointed out and caught is another
24 issuance we had of a discrepancy. When we
25 initially modeled purchased wind energy option in

1 our modeling, it had the availability to purchase
2 some capacity off that unit, as well. And so the
3 model didn't pick that capacity portion as far as
4 in the model, so we turned it into an energy-only
5 resource to basically let it be selected in either
6 2015 or 2020 block.

7 In doing that, we forgot to take the cost
8 out of the model that it had for a fixed O&M cost,
9 is how we would have modeled the capacity. When we
10 ended up removing that fixed O&M portion associated
11 with that purchased energy proposal, didn't make
12 any changes as far as in the selections of
13 resources in the modeling.

14 Another comment dealt with the equivalent
15 forced outage rate, or the EFOR as it's listed, for
16 the 43 megawatt combustion turbine. In MISO's new
17 -- or in their capacity construct they have today
18 or their module E, you basically take the amount of
19 potential capacity that you would get through a
20 summer type surge test and you would apply a forced
21 outage rate to that, either that you've
22 demonstrated or that you actually -- if it's a new
23 unit, you basically get -- you apply a value that
24 basically MISO develops for similar-type classes
25 and sizes of machines.

1 We ended up using the value for the 43
2 megawatt combustion turbine that MISO had developed
3 for that size resource rather than picking our own
4 number, and we just assumed that would continue for
5 the life of the project. We ended up making a
6 change where we had lowered that number to a value
7 that Mr. Hahn suggested, which was equivalent to
8 what the 88 megawatt combustion turbine had in
9 MISO's same table for an equivalent forced outage
10 rate, and it didn't change the selection of the 43
11 megawatt turbines over the 88 that was selected,
12 and all it really did is caused the staggering of
13 the selection of the 43 megawatt resources in
14 future years, basically pushed them back a little
15 bit.

16 Another point that there was was there was
17 a question about changing the energy cost for the
18 Calpine resource. That was another combustion
19 turbine resource that was received as a part of
20 that in our modeling. We had created what a --
21 energy price was associated with that. We had used
22 some numbers that we thought were more equivalent
23 to run times that we've seen on combustion
24 turbines, particularly how they're operated in the
25 Dakotas here, and Mr. Hahn suggested that we use a

1 lower number which would have been based upon some
2 assumptions that were given to us from Calpine.
3 When we ended up making those adjustments, it
4 didn't make any changes as far as to the model
5 selection.

6 There also is the question about the high
7 number of 43 megawatt combustion turbines that are
8 selected. And that really gets back to a function
9 of the model, itself, on a least cost. You know,
10 it's trying to come up with the best solution in
11 both the capacity and energy need. And that
12 particular resource, after the selection of the 88
13 megawatt resource, really provides from what's
14 available, you know, the best and most economical
15 way to meet our growing capacity and energy
16 requirements.

17 Mr. Hahn also suggested there were a
18 couple other additional modeling runs that we
19 should have considered. One of those would be a
20 high coal retirement. I did make some comments as
21 far as in my rebuttal on that.

22 In that particular case, which is one of
23 the ones that MISO is studying with some of the EPA
24 impacts, you know, there certainly is a potential
25 for a significant amount of coal retirement. If

1 that would happen or occur, we would end up seeing
2 at least the capacity reserve margins within MISO
3 would drop, would basically cause the price of what
4 capacity is available to go up. We would end up
5 seeing that natural gas turbines would set the
6 marginal cost for energy a greater percentage of
7 the time. And what that would really do is lead us
8 more in the selection of a combined cycle type
9 resource when you see higher energy prices. And in
10 doing that, it would end up selecting the 88
11 megawatt resource at Heskett Station basically to
12 make that configuration available.

13 Another one would end up being on the
14 production tax credit extension. If that would
15 occur -- we had done some modeling -- additional
16 modeling on that, as Mr. Hahn had suggested. If
17 the PTCs are extended, we end up seeing --
18 particularly I think it would continue to drive
19 through at least the -- at least the competition of
20 wind as a price taker as it exists in the energy
21 market, which really kind of keeps gas off the
22 margin, it keeps pricing down. It's an energy-only
23 resource, so it doesn't meet our capacity need and
24 it really drives us back into installing the lowest
25 cost capacity resource, which gets us back to the

1 88 megawatt resource as far as what the model would
2 look at.

3 So Mr. Hahn provided a number of comments
4 as far as on our EGEAS modeling. Going through and
5 looking at those with some additional runs, taking
6 a look and seeing the effects of some of the things
7 that he had suggested, we did make some changes to
8 our modeling. In our mind it didn't change the
9 selection of the 88 megawatt combustion turbine
10 resource in 2015.

11 Just a note to make as far as our modeling
12 and what it shows for what other's modeling would
13 basically select for capacity energy resource, it's
14 very similar. Today if you would go out, how do
15 you meet your capacity needs? It's really through
16 combustion turbines, is where we're at today really
17 based upon what's available from technologywise and
18 also uncertainty as far as on the permitting side.

19 On the energy side, that energy comes from
20 either combustion turbines and/or wind as far as
21 with production tax credits being extended. So I
22 think our model as far as what it's showing
23 basically responds in a manner that's similar to
24 what others are seeing.

25 Also in both the 2009 and 2011 integrated

1 resource plans that we developed, both resource
2 plans showed the selection of a combustion turbine
3 resources in 2015.

4 This is just a little bit of a
5 side-by-side, some of the outcomes of what comes in
6 EGEAS. The first column that's here basically
7 shows what we had in our base case in our
8 integrated resource plan.

9 Mr. Hahn had suggested that we make some
10 additional changes from some additional modeling
11 runs. We did those. That basically put back in
12 the inclusion of the Illinois combustion turbine
13 resource and also the North Dakota wind proposal.
14 In doing both those, both those resources were
15 selected as part of the least-cost plan in 2015.

16 There was also an additional modeling run
17 that was made to basically remove those resources,
18 keeping all the other assumptions in place, which
19 basically continued to select the 43 megawatt
20 combustion -- a 43 megawatt combustion turbine and
21 the 88 megawatt combustion turbine at Heskett
22 Station basically in 2015.

23 The other one is a note on those same
24 changes. We ended up seeing, based upon wind at
25 \$1,750 a kilowatt and also the extension of the

1 production tax credits beyond the 2012 assumption,
2 basically with the addition of an additional 120
3 megawatts of wind for the company to build and own
4 in 2011.

5 We end up looking in the out years,
6 basically we keep seeing the same thing. We just
7 see the addition of combustion turbines that we end
8 up seeing at various years.

9 I'll talk a little more later, there was
10 the comment that Mr. Hahn also made around the
11 difference in net present values between the
12 various scenarios showing what the additional cost
13 was particularly of the Illinois proposal, and in
14 doing that, I'll explain why that's not a good
15 measure a little bit later.

16 I want to spend a little bit of time
17 talking about this North Dakota wind proposal that
18 came out of our request for proposal that was
19 identified as a potential least-cost resource as it
20 was bid in the RFP. That proposal, itself, was an
21 energy-only resource. There was no capacity that
22 it provided. It was a 150 megawatt project which
23 was located near Hettinger to be connected to our
24 system.

25 When we looked at this proposal initially,

1 we go back to and talk about the timing for the
2 request for proposal, which was issued in June of
3 2010, the bids were received in the fall, and we
4 kind of got through the short list before the end
5 of the year.

6 In October of 2010 MISO had completed a
7 study looking at system impacts, and that this
8 project was included and is part of a larger study,
9 and it was showing network upgrades that were very
10 significant. For this particular project it would
11 have been in the neighborhood of several hundred
12 millions of dollars for network upgrades.

13 In looking at that, we considered that
14 piece by itself would have made it more expensive
15 than another proposal that we did end up modeling,
16 which was for another wind project that's built and
17 connected to our system and has the benefits of the
18 production tax credits.

19 Also, when we look at the Hettinger area,
20 it isn't typically an area that we would go and
21 look at building a wind project, particularly one
22 that's of this size. One of the concerns ends up
23 being that particular area down there, we don't
24 have a lot of load and we're heavily connected with
25 WAPA down there. And one of the concerns with that

1 area is any flows out of Hettinger want to go south
2 and it basically pushes flows down onto the WAPA IS
3 system in South Dakota. And we also have a limited
4 amount of transmission capabilities that we have on
5 that line. We have right now the 50 megawatts that
6 go on that 230 line that's down in the Hettinger
7 area.

8 So in looking at the potential for costs
9 for the network upgrades at the time and also
10 looking at the potential impacts that could also be
11 added for cost based upon flows onto the WAPA
12 integrated system or use of their facilities, we
13 considered this proposal to be higher cost than the
14 other purchased wind energy option that we did have
15 in the EGEAS model. Like I said, that other
16 project was for a project that was built and
17 connected to our system today.

18 Next, I want to talk about another
19 proposal, what we'll refer to as the Illinois
20 proposal, which is a 176 megawatt simple cycle
21 combustion turbine project. It's located along the
22 border between Illinois and Indiana. As bid, this
23 project offered to us either 88 megawatts or 176
24 megawatts. There's four turbines that are part of
25 this site, so they were willing to offer us either

1 two or four turbines. And as bid, it had a 20-year
2 power purchase agreement for a term to it.

3 We did not consider this a viable
4 long-term resource for a number of points. One,
5 based upon the length of the term of the agreement
6 and also with MISO's development of their new
7 resource adequacy construct, we were concerned with
8 the ability of how we could use this particular
9 resource, we'll talk about in a little bit, based
10 upon the zonal concept that MISO has moved towards
11 as far as resource adequacy.

12 This resource provides us no local
13 reliability benefits to our system. It's an
14 off-system resource. It's located elsewhere.
15 Those reliability benefits basically end up being
16 the energy supply it can make, it ends up providing
17 voltage support, and the other thing for
18 reliability, you end up with the ability to
19 mitigate transmission outages or also congestion.
20 Those are things a resource in Illinois would not
21 provide to our system.

22 This is also an energy resource basically
23 located three states away from us. It's almost
24 like we would have our own independent power
25 project that we would have in another state. It

1 would dispatch based upon the needs within MISO,
2 but really over within that Indiana, Illinois area,
3 and provide services off to customers in Indiana
4 and Illinois.

5 We also had concerns as far as potential
6 changes or impacts with MISO membership. The past
7 couple years there have been a few entities between
8 us and this resource that have talked about
9 potential withdrawals from MISO. And, also, this
10 is kind of on the eve a little bit when Duke and
11 Energy -- Duke and First Energy had announced
12 they're leaving the MISO and it was kind of up in
13 the air if that was a trend that was going to
14 continue or not.

15 If you end up losing membership within
16 MISO where it affects that path, now it really gets
17 back into how could you use that resource and still
18 be able to get that capacity credit that's located
19 three states away all the way back to serve our
20 customers.

21 And the other one is there's also impacts
22 on further changes that are potential as far as
23 with MISO's resource adequacy rules. Just a year
24 ago when we entered into the We Energies' contract,
25 basically capacity within MISO was deliverable

1 across the entire footprint. There was nothing
2 about zones or there was really no concerns as far
3 as if you would be able to use capacity that would
4 be located like in the case of We Energies in
5 Wisconsin or over in Indiana and Illinois, it would
6 all just work as a part of the process. Now we end
7 up creating separate zones and separate studies and
8 separate option prices. And there is the ability
9 to basically, as we saw, within a year that MISO
10 could further change those rules that would
11 basically affect how we could use this particular
12 resource.

13 So it really gets back into what's the
14 true cost of this proposal, as we look over the
15 horizon, what are the potentials, what are the
16 additional things that could be added.

17 As we modeled this in our resource, we
18 modeled it as bid. We didn't go through and try to
19 quantify, put additional dollars on or say these
20 are additional things that would be considered.

21 Mr. Hahn did offer a side-by-side
22 comparison. As we go into that, we'll try to
23 quantify some of the additional changes or
24 suggestions made that show maybe how we end up
25 accounting for some of the potential true costs

1 that could be associated with this proposal.

2 MISO's resource adequacy construct or how
3 they end up changing their capacity market or how
4 everybody deals with their capacity needs was filed
5 with FERC on July 7th of 2011. That process is
6 currently on hold just because of the large number
7 of comments, so it's kind of unknown when FERC is
8 going to rule on this.

9 The current intent is that it begins with
10 the planning year 2013 to '14, so this would be
11 June of 2013 through May of 2014 planning year, is
12 when it would begin. This includes a mandatory
13 one-year auction process basically looking at all
14 load and capacity within MISO.

15 It also creates a new concept, which is
16 the local resource zones, so instead of this
17 capacity being universally deliverable, or if you
18 had capacity credits anywhere in the footprint of
19 MISO that you could use them to serve any load
20 within MISO, now it has more of this zonal --
21 resource zone concept. And in doing that, there is
22 a mandatory auction and then a separate auction
23 clearing price that does exist for each local
24 resource zone.

25 This is a map that currently exists that

1 shows, as MISO proposed, their local resource
2 zones, that shows the seven zones, and they're kind
3 of broken along traditional service territory lines
4 and also natural breaks kind of in the system as
5 far as boundaries with lakes and rivers and other
6 sorts of things.

7 Montana-Dakota obviously is located in
8 this zone 1. It's a fairly large, broad zone. The
9 resource we're talking about on this Illinois
10 proposal is located on the border down here.

11 When MISO looks at zones, and what they're
12 looking at is how does congestion, how do
13 constraints, how is the transmission system used in
14 saying that capacity is not universally
15 deliverable. And so what MISO does is they look at
16 each zone and they look at the amount of capacity
17 and also generation in each zone, and then they'll
18 basically look at the ties between zones to see how
19 much you could export and import in. And then
20 based upon the requirements that you need, you make
21 the determination, is the zone deficit itself, that
22 basically, you know -- or does it have an excess
23 amount of resources. And you can basically use
24 that to decide if capacity in one zone, is it able
25 to be, in a sense, from a pricing standpoint

1 portable to the next zone or basically is there a
2 limitation.

3 And so each of these zones will basically
4 do their own study to look at capacity generation
5 and the transfer capabilities between zones. If we
6 look at zone 1 and we look where this resource is
7 located, there ends up being two zones we basically
8 have to jump across as far as import/export
9 capabilities go.

10 One of the last things that MISO added
11 because of a lot of concerns that stakeholders had,
12 in the spring of 2011 they looked at more the
13 concept of self-scheduling and opting out and
14 ultimately they had the creation of this fixed
15 resource adequacy plan. Some of that dealt with
16 issues more on PJM and minimum offering prices and
17 other concepts that folks had that if they had a
18 capacity resource and there was an excess amount of
19 capacity in their zone to their load, they may not
20 be able to get fully hedged or priced within their
21 own zone.

22 So MISO came up with this fixed resource
23 adequacy plan where basically if you put one of
24 these together on an annual basis, you basically
25 would show within your zone how you meet your

1 capacity, where your capacity comes to meet your
2 load, plus also your planning reserve margins, and
3 you also have the ability to have a few hedging
4 mechanisms if you didn't have your resources within
5 the same zone.

6 Some of those concepts ended up being
7 opt-out provisions, self-scheduling provisions and
8 also this new term of a grandmothered agreement.
9 We kind of kicked around a little bit where did
10 grandmother agreements come from. There actually
11 is another term for grandfathered agreements as it
12 deals with transmission service agreements in the
13 tariffs, so I think they picked grandmother this
14 time.

15 But on the ability to opt out of the fixed
16 resource adequacy plan, this is really in the case
17 where you would have, in the case of the Illinois
18 proposal, capacity credits in a different zone and
19 load that you have in a different zone or LRZ.

20 There are some ways at least that you can
21 financially hedge across those. One ends up being
22 if you would build transmission across one of those
23 zonal boundaries that would increase the import/
24 export capability, you would be able to get credit
25 for that amount of additional transfer capability,

1 basically uses a pricing -- hedging mechanism.

2 The other one that's in there is
3 self-scheduling, and that really only applies if
4 you have load and capacity resources available in
5 the same zone. So basically you could just bid
6 everything in at zero and be a price taker. So
7 kind of like the energy market, whatever energy
8 pays to the generators, the load basically pays the
9 same thing, so it should net out, you shouldn't
10 have a -- you shouldn't be in a negative position.

11 Then there's this concept of a
12 grandmothers agreement. So knowing that people
13 had historical resources that were located in
14 different zones, there was the concept of you could
15 have a grandmothers agreement if you had entered
16 into a power purchase agreement or ownership in a
17 resource prior to July 15th of 2011 and you had a
18 transmission service request that would go from
19 that resource back to the zone where you want to
20 use those credits.

21 In the case of the Illinois proposal, none
22 of these provisions would have applied unless we
23 would have tried to go out and get a transmission
24 service agreement for the Illinois proposal and
25 would have assigned the agreement prior to July

1 15th of 2011. That ends up being a risk, too,
2 because you still don't know what the rules are. I
3 mean, you could pick a pretty substantial financial
4 position, not know what the rules are, they could
5 change. And the other one is if you get a
6 transmission service request to have a
7 grandmothers agreement, it comes at a cost that is
8 quantifiable because you end up paying as far as
9 the MISO tariff rate for that transmission service
10 request.

11 So getting back again to this map, which
12 at least shows the zones, and one of the concerns
13 is typically around the zones, that if you have an
14 auction that occurs in a zone like zone 1 and if
15 zone 1 is deficient capacity resources or its
16 auction price is higher than what it would be in
17 another zone, our capacity credits from a proposal
18 like in Illinois would get paid the auction
19 clearing price in Illinois. Our load ends up
20 paying the auction clearing price if we're short
21 based upon North Dakota.

22 So potentially it exists if there's a
23 shortage of capacity that exists in zone 1, that we
24 could pay something close to the cost of a new
25 entry, or CONE, that MISO calculates basically for

1 the cost of a new combustion turbine, simple cycle
2 or combined cycle. And if you're in a zone where
3 there's an excess, this cost could be near zero.

4 So one of the concerns is that basically
5 if there's an excess in zone 4, the market would
6 basically pay zero if everybody self-schedules.
7 For their capacity requirements in zone 4, if we're
8 deficient over in zone 1, we could end up having to
9 pay the cost of CONE, or cost of new entry, in zone
10 1. Therefore, we wouldn't be able to fully use
11 these credits to serve our customers' load because
12 they're really just serving those requirements that
13 are really in Indiana.

14 A little bit on excess capacity, because
15 it does kind of matter with excess capacity what
16 sort of export and import capabilities you have
17 between zones.

18 MISO currently is forecasting -- this
19 comes out of one of their EPA impact analysis
20 studies they did -- that with no unit retirements,
21 certainly their adequate capacity reserve margins
22 continue as far as for the foreseeable future.

23 Two scenarios are out there that MISO
24 looked at as far as coal retirements, either a
25 3,000 gigawatt coal retirement or a 13,000 gigawatt

1 coal retirement. This particular one, there
2 actually -- currently in MISO's Attachment Y
3 process, there's actually 2,500 megawatts of
4 resources, largely coal, that are set out there for
5 retirement. So even today this is basically the
6 starting place of where we're at, because we're
7 already seeing the onset of the unit retirement
8 pieces.

9 With potential environmental regulations
10 there is a potential to see a more significant
11 change as far as in the excess capacity that exists
12 within MISO due to unit retirements. We look at
13 2015, if we get into this high case, we end up
14 seeing where the reserve margins are below the 15
15 percent threshold, so we would basically see
16 deficits that exist as early as 2015 when we end up
17 needing capacity resources.

18 This is another just illustration from
19 MISO's supply adequacy working group on June 9th of
20 this year, looking at zones and as far as
21 generation and load, if there's an excess, where is
22 it. Well, it's not in zone 1. If we take a look
23 at the load that's in there, we see it's actually
24 the only zone that's out there that's deficient
25 resources within it. So basically zone 1 has to

1 get requirements from other zones. The other zones
2 all have an excess. Where it all exists is
3 actually off into the eastern part, in the central
4 part.

5 So the cost adders as far as looking at
6 customer impacts with the Illinois proposal, we
7 talked about no local reliability benefits that it
8 provides here in our service territory. There's
9 the additional cost for a MISO transmission service
10 request from Illinois to North Dakota if we would
11 have tried to have gotten this agreement as a
12 grandmothers agreement.

13 I'll also talk a little bit as far as our
14 relationship with WAPA and the integrated system
15 transmission charges that basically we could
16 potentially incur in not being able to offset with
17 the unit that would be connected to our system.

18 One of the other ones, it's a resource
19 that's located in Illinois, and so that's where its
20 pricing node is paid as far as what's the energy
21 price in Illinois, not what our load pays in North
22 Dakota. So one way to look at this is it's really
23 just strictly a capacity purchase we're getting.
24 And I'll show that in that side-by-side.

25 The other one is through the lack of

1 benefits associated with on-system resources that
2 Ms. Stomberg talked about. A resource located at
3 Heskett Station would provide us with improved
4 system reliability, it serves load on our system,
5 it provides voltage support, it also can be used to
6 mitigate transmission outages or congestion on the
7 system. It provides us with synergies and
8 opportunities with Heskett Station. We end up
9 seeing the long-term benefits we receive of
10 ownership of resources.

11 I'll talk next about the avoidance of some
12 WAPA transmission charges that we're also looking
13 at seeing beginning at the end of 2015. The other
14 one, it reduces our reliance on capacity purchases
15 from other, from what potentially could be 25
16 percent down to 6 percent when it's coupled with
17 the new demand response program in 2015. And it's
18 also a cost-effective resource compared to other
19 alternatives that we have.

20 Montana-Dakota has a long history with
21 Western Area Power Administration. We're very
22 highly connected to their system as I'll show you.
23 We have a historical transmission service agreement
24 with them that expires the end of 2015. I think
25 it's one of the few remaining grandfathered

1 agreements that they have left as far as on their
2 system. This has provided benefits to both MDU and
3 WAPA customers over the years by basically
4 providing sharing of transmission facilities
5 between our companies.

6 Post the expiration of this agreement, so
7 at the end of 2015, we'll be required to take
8 network transmission service from Western Area
9 Power Administration and the integrated system for
10 services that we're not able to serve from our own
11 facilities or from MISO facilities. So what that
12 ends up meaning is rather than avoidance of cost
13 that we've had on transmission service because
14 we've had a sharing agreement, now we'll be paying
15 the WAPA tariff for service that we take from them.

16 And one of the ways to avoid even to take
17 service is either you have sufficient transmission
18 facilities or you could use generation to basically
19 offset the need to rely on WAPA's transmission.
20 And this is a process we've discussed with them
21 already. We're actually taking this type of
22 transmission service from them in parts of our
23 service territory because our loads are in and
24 above the levels that were specified in the
25 transmission service agreement. So from a

1 standpoint they said you're frozen at these levels
2 that you had forecast in one of the appendix,
3 anything above that, if you don't have sufficient
4 facilities, you have to take out transmission
5 service.

6 This is a map that shows regional
7 transmission when we look in the area. So it's
8 those facilities that are 115 kV and above. A
9 little bit of colors, that either you have the
10 yellow facilities that are the WAPA integrated
11 system facilities, there are the green facilities
12 that are jointly owned, this is the Coyote 345
13 line, and then you have the blue facilities, a
14 little hard to see, but those end up being the MISO
15 facilities that are regional transmission in the
16 area.

17 If we overlay our service territory map,
18 we'll see we're primarily out on the western edge
19 of this map and there's a lot of yellow that
20 exists. If we take out all of the WAPA
21 transmission in the area, we'll end up seeing as
22 far as the vast amount of our service territory
23 basically is disconnected, that there is no path
24 from facilities that we own 115 kV and above that
25 we can get back and serve our customers without

1 reliance on WAPA and their system.

2 From a note here, if we look at number of
3 connections -- these are transmission
4 interconnection points that we have with others --
5 we have three connections with Otter Tail. One of
6 them is down at Ellendale, one of them is at
7 Heskett, and the other one is at Coyote Station,
8 are our three connections that we have with MISO.
9 We have 35 connections with the WAPA and Basin
10 transmission system.

11 I want to go back just a little bit on the
12 side-by-side comparison I showed you before. The
13 first column, the base case of the integrated
14 resource plan and also the additional cases that
15 were requested by La Capra, the inclusion of the
16 Illinois combustion turbine and the North Dakota
17 wind project, as well as some other adjustments
18 that we had been requested to make to the model.
19 These are the same slides that we had from the
20 previous one.

21 One of the things that kind of jumps out
22 and is very stark to look at is the dollar value
23 delta that you end up seeing on the net present
24 value between the scenarios, and you end up seeing
25 the dollar value deltas either with and without the

1 Illinois combustion turbine proposal and the North
2 Dakota wind project that basically says that this
3 configuration could be almost \$300 million of a
4 cost savings that it could provide than if we would
5 just go and exclude these two resources.

6 One of the concerns with looking at EGEAS
7 in the modeling in this case to look at this is
8 EGEAS picks resources over a 20-year period and
9 then basically it extends those costs out over 50
10 years. So if you added a resource in year 20,
11 rather than the model only seeing that cost and
12 taking that cost impacting the first year, it
13 extends it out over a 30-year life. So if you add
14 a large capital resource in the last of the
15 modeling years, it basically will continue those
16 costs so you can see how those long-term benefits
17 are received.

18 One of the anomalies that happens with the
19 20-year power purchase agreement is that it expires
20 after that 20-year study period. So when the model
21 sees that and gets to year 25 and that resource has
22 expired, all the model can do is basically assume
23 there's another resource that has that same cost
24 and terms that it replaces it with, so that 20-year
25 proposal really turns into a 45-year proposal over

1 the 50 years of study.

2 So the comparison between these as a
3 dollar value delta between the value that a
4 resource in Illinois could provide over the Heskett
5 resource is not, in my mind, a valid number for
6 comparison.

7 We did a separate additional case that we
8 looked at which used the same changes to the model
9 that Mr. Hahn and La Capra had suggested. We
10 removed the Illinois combustion turbines and
11 basically we assumed that there was no production
12 tax credits or no wind. The North Dakota wind
13 project was also removed. That way what we tried
14 to really get back to is if we just took from our
15 base case, made the other changes except for the
16 wind and the Illinois proposal, what's the dollar
17 value that we would start with from a net present
18 value.

19 If you look at that number, it compares
20 very close to where our original base was. And
21 then we basically allowed the model to go back and
22 select as the only additional resource the Illinois
23 combustion turbine project and basically gave it a
24 15-year term on the power purchase agreement. That
25 way it had to replace that resource in the last

1 year of the study year, so that way you could
2 basically see this effect that we're talking about
3 as far as the model and as far as how the model
4 could basically -- has almost an anomaly as it
5 deals with a power purchase agreement replacement
6 after the 20-year study period.

7 If you look at that, we end up seeing the
8 dollar value delta between those scenarios is down
9 to something that's like \$59 million instead of
10 \$300 million. This does not include any of the
11 additional cost to the Illinois combustion turbine
12 proposal that are potentially impacts even if we
13 talk about the WAPA transmission service agreement
14 coming up or as if you had to take out a
15 transmission service request from MISO.

16 Judge Wahl, the next portion of my slide
17 is a confidential or sensitive information.

18 JUDGE WAHL: All right. Just a moment,
19 please. For those who may be listening to the
20 stream on the Internet, the Internet stream will be
21 interrupted, perhaps only momentarily, but, in any
22 event, as long as Mr. Neigum's testimony concerning
23 trade secrets lasts, perhaps several minutes, and
24 it will then resume when his testimony concerning
25 trade secrets is completed.

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You may proceed, Mr. Neigum.

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[REDACTED]

MR. KUNTZ: That completes Mr. Neigum's --

JUDGE WAHL: Just a moment, please, Mr. Kuntz.

All right, Mr. Kuntz.

MR. KUNTZ: That completes Mr. Neigum's presentation. He's available for cross-examination.

JUDGE WAHL: Mr. Gruman, when you're ready.

MR. GRUMAN: Thank you, Your Honor.

CROSS-EXAMINATION

BY MR. GRUMAN:

Q. Mr. Neigum, do you have your direct and, I guess for that matter, all of your testimony in front of you available?

A. Yes, I do.

Q. Thank you. I would like you to first

1 proceed to page 5 of your direct testimony.

2 COMMISSIONER CLARK: It would be helpful
3 for me, perhaps the rest of the Commission, if they
4 could be referred to when we move between
5 testimonies by the exhibit or tab number that's
6 provided.

7 MR. GRUMAN: Certainly.

8 COMMISSIONER CLARK: That would be great.
9 Thank you.

10 MR. GRUMAN: That would be 111.

11 COMMISSIONER CLARK: Thank you.

12 MR. KUNTZ: His direct is 107.

13 MR. GRUMAN: Is it? Oh, I stand
14 corrected. 107. Thank you.

15 Q. (MR. GRUMAN CONTINUING) Lines 7 through
16 14, if you could review that.

17 COMMISSIONER CLARK: Which page is that
18 again?

19 MR. GRUMAN: Page 5, MDU 107.

20 THE WITNESS: I've reviewed it.

21 MR. GRUMAN: Thank you. Are the
22 Commissioners ready? Okay. Thank you.

23 Q. (MR. GRUMAN CONTINUING) Are you -- in
24 your testimony there from lines 7 through 14 on
25 page 5, that's what you're referring to as 176

1 megawatt Illinois CT or the Tilton project; is that
2 correct?

3 A. Correct.

4 Q. Now, you indicate as part of your analysis
5 that part of the reason why this Tilton proposal
6 was not viable is because it obtained a 20-year
7 term period, is that correct, and, of course, that
8 it was located three states away?

9 A. Correct.

10 Q. What was your specific concern about the
11 20-year term?

12 A. The concern would end up being how it
13 would be used or if it would even be viable as part
14 of MISO's resource adequacy being such a large
15 distance away from our service territory.

16 Q. Did you consider asking for something
17 shorter?

18 A. We did not.

19 Q. And why not?

20 A. I guess that wasn't part of our analysis.
21 We had looked as it was bid and so we looked at
22 that. I think the issues as far as deliverability
23 of capacity or how it would fall into MISO's
24 market, certainly at the timing of this analysis,
25 you know, MISO was certainly well in the middle of

1 a lot of stakeholder comments and concerns with
2 resource adequacy, and so what I talked about is
3 how the final proposal looks like that they filed
4 with FERC, it was largely different at that point,
5 and as far as there wasn't anything that dealt with
6 any ability to self-schedule, any sorts of things
7 that dealt with a lot of the details they put
8 together.

9 So not knowing how MISO was going to allow
10 the retrieval or be able to use particularly a
11 resource that far away really had a lot of concerns
12 and not being able to know what the rules were
13 going to be.

14 Q. Proceeding on to the fact that this
15 Illinois Tilton proposal is three states away,
16 could you please just reiterate your specific
17 concerns in that regard?

18 A. Being three states away, it's not
19 connected to our service territory. I mean,
20 historically prior to MISO's capacity construct
21 that it has, in order to be able to use a resource
22 that would be off your system, you would have to
23 get a transmission service request to basically go
24 and to be able to show that that resource is
25 deliverable back.

1 It's kind of one of the things that exists
2 within MISO's current process, is you can get a
3 transmission service request or you may not need
4 one. It kind of depends, and so it's kind of up in
5 the air a little bit.

6 And the other one, with three states away,
7 is the resource dispatches to basically meet the
8 needs of customers someplace else. It doesn't
9 dispatch to meet our customers' needs that we have
10 in our service territory.

11 Q. Now, concerning these deliverability
12 concerns that you just spoke about, did you perform
13 any studies or analyses to evaluate the potential
14 deliverability issues?

15 A. Well, there's two parts to it. One,
16 there's the question if you put in for a
17 transmission service request and the study was
18 done, is it available or are there upgrades that
19 are required.

20 The other one that's a part of that is if
21 you are able to get a transmission service request,
22 it comes at a cost. And so when we look at -- as
23 in the case of the WAPA addition we had on the
24 side-by-side that's \$2.95 a kW-month. If you'd get
25 a transmission service request, you'll pay the MISO

1 Schedule 7. It's their firm point-to-point
2 transmission rate to bring that back. That rate is
3 currently \$2.44. So if you would go off and study
4 that to get that sort of service or be able to
5 designate that path exists, it comes at a cost.

6 Q. And I certainly don't doubt your knowledge
7 of these deliverability concerns. I guess my
8 statement is, has this been reiterated in a
9 memorandum or something like that in that regard?
10 Has it been formalized in some type of document?

11 A. Which deliverability issue?

12 Q. As far as your substantiation of what you
13 just discussed.

14 A. As part of our analysis, I think we had
15 provided a set of -- an overview of our analysis
16 and that level of detail was not included.

17 Q. Did the company request an availability of
18 transmission from MISO?

19 A. We did not seek a transmission service
20 request for this proposal.

21 Q. And why not?

22 A. Dealing with the concerns for MISO's
23 resource adequacy rules, it was unknown as far as
24 how a transmission service request would be worked
25 or if it would even be viable as part of MISO's new

1 resource adequacy rules. And the other one is it
2 comes at a cost, and that cost basically as we seen
3 on the side-by-side would make it almost the same,
4 if not higher, than what our own proposal is.

5 Q. When you say "comes at a cost," could you
6 just please explain that further?

7 A. If you end up taking the cost for the
8 Illinois proposal as it's bid, you're really
9 looking at a capacity resource and an energy
10 resource, you know, that are located three states
11 away, and so if you end up having to look at what
12 are the true costs basically to be able to use that
13 resource or if there is any additional means,
14 mechanisms, tools, if it's like a transmission
15 service request or in the case as we talked about
16 how it could be used to offset a resource on our
17 system as far as for the WAPA IS transmission cost,
18 there's additional cost matters that an off-system
19 resource could incur, and so basically as you take
20 those pieces into account as we looked at it in the
21 side-by-side, either the cost delta between any
22 benefits that it provides in cost or savings
23 basically is mitigated or is almost eliminated
24 completely because of the cost to utilize an
25 off-system resource.

1 Q. Thank you. In your same, so it would be
2 MDU 107 of your direct, could you please proceed to
3 page 6?

4 A. Yes.

5 Q. And lines 19 and 20. You refer to a 155
6 megawatt CT and a 345 megawatt combined cycle unit.
7 Are these planned or existing units -- these
8 resources? Excuse me.

9 A. If I remember correctly, the 155 megawatt
10 resource was constructed, and the combined cycle
11 project was an addition to the 155 megawatt
12 resource.

13 Q. And where are these two projects located?

14 A. I believe they're in Minnesota --
15 Minnesota or Wisconsin.

16 Q. I mean, did you do any studies
17 concerning -- did you have any deliverability
18 issues concerning these two projects?

19 A. We had looked at these projects. We
20 didn't do the deliverability studies. Certainly
21 there would be additional costs when we ended up
22 including them in our modeling as they were bid
23 because they were closer resources to our system.
24 They're similar to capacity that we've purchased
25 from NSP in recent years and also from We Energies.

1 From a locational side off our system, kind of
2 looked at that as saying what's the typical market
3 price that we're looking at for capacity. When we
4 went through and put these in our models, they
5 weren't selected as resources so we didn't have to
6 go and look to add a transmission service request,
7 they were already more expensive.

8 Q. If you could please proceed to page 8 of
9 your direct, and then beginning on line 19,
10 proceeding to then page 9, 1 and 2, if you could
11 just review that.

12 A. Yes, I've reviewed that.

13 Q. What was the basis for the expected
14 capacity factor of 10 to 20 percent?

15 A. The EGEAS modeling, itself, will actually
16 dispatch the units on an economic basis, and so the
17 EGEAS in year 2015 had selected an 88 megawatt
18 resource and two 43 megawatt resources. So in
19 looking at the amount of energy that was looking to
20 be forecasted to be dispatched from those
21 particular three resources, basically -- and we're
22 only looking to construct one resource, which was
23 the 88 megawatt, there was that amount of need that
24 was going to be supplied from that aggregate of
25 resources, so the potential exists that an 88

1 megawatt resource based upon the EGEAS modeling in
2 2015 could supply anywhere between 10 and 20 if it
3 would pick up the additional generation on those
4 two 43 megawatt resources.

5 Q. And perhaps you mentioned this, but does
6 EGEAS have as one of its outputs the expected
7 cap -- capacity factor of the unit selected?

8 A. Could you repeat that question?

9 Q. Certainly. Does EGEAS have as one of its
10 outputs the expected capacity factor of the unit
11 selected?

12 A. Yes, it does.

13 Q. In the EGEAS runs it selected the 88
14 megawatt peaker. Do you recall what the capacity
15 factor was for that unit?

16 A. I'd have to go look. I would think it was
17 in that 10 percent, but I would have to go look.

18 Q. Would it refresh your memory -- the EGEAS
19 factors from 2015 to 2030, would that average about
20 4.4 percent for the 88 megawatt CT?

21 A. I'm not sure. Can you repeat that?

22 Q. Certainly. Isn't it true that the EGEAS
23 capacity factor for the 88 megawatt CT from 2015 to
24 2030 averaged about 4.4 percent?

25 A. I'm not familiar with doing that analysis

1 so I'm not sure. I would have to go look.

2 Q. Do you know, what's the heat rate for the
3 88 megawatt CT?

4 A. I could look it up. I think it's around
5 10,800.

6 Q. Okay. And do you remember what the heat
7 rate was for the Tilton project -- Tilton proposal?
8 Excuse me.

9 A. I think it's slightly over 10,000.

10 Q. How about 8,900? Does that sound about
11 correct?

12 A. I'd have to look. I thought it was a
13 different value.

14 Q. The Illinois CT, does that have a lower
15 variable O&M cost than the proposed 88 megawatt
16 peaker?

17 A. As modeled, it did. In looking at their
18 variable O&Ms, it seems low based upon the type of
19 balance of plant facilities that it has.

20 Q. So I guess our question is, with the lower
21 heat rate and the lower variable O&M costs for the
22 Tilton project, wouldn't the Tilton project have a
23 lower dispatch price than the 88 megawatt peaker?

24 A. From a -- it potentially could. It
25 depends how it's bid into the market and where the

1 market point is located.

2 Q. So it potentially could be dispatched
3 ahead of the MDU -- or the 88 megawatt peaker; is
4 that correct?

5 A. Are we talking geographically as it's
6 located in Illinois as it's compared to North
7 Dakota?

8 Q. I guess please explain.

9 A. Well, if it's located three states away, I
10 mean, the likelihood that the two of them are going
11 to compete against each other to dispatch next I
12 think is very small just because of their
13 geographic areas. And it will dispatch in Illinois
14 because of what's occurring in Illinois, not
15 because of what's occurring in North Dakota.

16 Q. It would be a cheaper unit? I mean, it
17 has a better heat rate?

18 A. From a market standpoint, yes.

19 Q. So I guess our question is, wouldn't the
20 Tilton project serve as a better hedge against
21 higher market prices than the 88 megawatt peaker?

22 A. I would say -- I would not say that's
23 correct. I mean, the hedge -- if you want to hedge
24 against market prices, you really need to have a
25 resource that's located closer to your load because

1 that's ultimately what you will pay -- or your
2 customers will pay. A resource that's located
3 three states away will basically dispatch to serve
4 the needs and what the prices are in that area. So
5 if you end up in a situation where we have a peak
6 day, it's hot, it's cold, and there's some large
7 transmission outage occurs or large generation
8 outage that occurs here, basically we could see
9 congestion that would basically limit the ability
10 of power from other parts of MISO to serve our
11 customers of which case we end up seeing locally
12 that prices go high at least in this local area.
13 And if it's an outage or a problem that could
14 extend for a long period of time, we could
15 basically incur paying somebody else's energy costs
16 for a higher price unit than if we had it connected
17 in our own system to hedge that energy supply.

18 Q. Thank you. If you could proceed to your
19 rebuttal testimony and that would be MDU 111, and
20 page 8 of your rebuttal.

21 A. I'm there.

22 Q. Thank you. Towards the beginning there, I
23 believe it's line 3 in particular, you discuss the
24 equivalent forced outage rate of 22.31 percent for
25 the 43 megawatt CTs; is that correct?

1 A. Correct.

2 Q. Did you assume that EFOR value for all the
3 43 megawatt CTs selected by EGEAS?

4 A. We did.

5 Q. Does EGEAS allow for this EFOR value to be
6 changed from year to year?

7 A. We haven't used that tool. In reading Mr.
8 Hahn's direct testimony, he alluded to that
9 possibility, but it isn't something that we've
10 pursued ourselves or have used.

11 Q. So EGEAS has the capacity to do it, it's
12 just not something you've ever done before?

13 A. It may. We haven't explored that so I
14 don't know.

15 Q. I guess, can you just broaden that? Why
16 is that something you haven't explored before?

17 A. I guess we haven't had a situation where
18 we've needed to use that or try to find some way to
19 take that, you know, change in capacity effects
20 into account. We typically have modeled that
21 basically the amount of capacity that a resource
22 provides is either based upon what it historically
23 has or in the case of a new resource, basically it
24 ends up remaining constant.

25 Q. Now, isn't it true that in the first year

1 of operation MISO requires capacity resources to
2 use a class average EFOR, but after that an
3 individual unit's actual EFOR is used; is that
4 correct?

5 A. That is correct.

6 Q. Do you believe that a new CT will have an
7 EFOR that is too high -- or that is this high for
8 its entire life, i.e., 22.31?

9 A. I think it's probably unlikely.

10 Q. I guess just to reiterate, I would like
11 next for you to refer to Exhibit DJN-3, which is
12 part of MDU 111.

13 A. Yes.

14 Q. Now you've added annual costs for WAPA
15 transmission to the costs of the Illinois CT; is
16 that correct?

17 A. Correct.

18 Q. What we would like -- and I guess it's
19 kind of a compound question. I would like again
20 for you to provide in detail what these costs are,
21 when and why they would be incurred, tariff and
22 related documents and the current rates and the
23 basis for them.

24 A. Sure.

25 Q. If you could do so, please.

1 A. Sure, I can do that. The lines that we're
2 talking about for the WAPA IS transmission, this is
3 an offset --

4 COMMISSIONER KALK: Did you have a chance
5 to look at that document? Is that trade secret?

6 THE WITNESS: That information is not.
7 There's other information on this page that are,
8 but that particular one is not. And as we look at
9 the WAPA IS that we've talked about, this deals
10 with the expiration of our transmission service
11 agreement with WAPA on December of 2015. At that
12 time -- and we actually have entered into network
13 transmission service for WAPA already. As I said,
14 we've entered into that for places where we have
15 loads that are above the levels that are part of
16 our existing transmission service agreement.

17 And what WAPA has taken from a standpoint
18 of how you calculate these loads -- and these are
19 calculations we currently look at particularly out
20 on the western part of our system where we don't
21 have a connection back to MISO, we're disconnected,
22 and we also have large amounts of growth, we
23 basically take our system, we put it into load
24 pockets that it has, and we disconnect all the WAPA
25 facilities from us, and then we take a look and

1 see, based upon company transmission and generation
2 we have, how much of that load can we serve from
3 what's left.

4 And then in doing that, what we also do is
5 take and in a contingency basis work on an N minus
6 1 and say in a contingency, because we're really
7 relying on WAPA to satisfy our N minus 1
8 contingencies -- we also do an N minus 1 and
9 basically see what's left. So there's a system
10 intact amount of service we can provide and also an
11 S minus 1 contingency.

12 And that N minus 1 contingency -- this is
13 all a part of how we settle with MISO today in
14 their current tariff. As far as how we take
15 additional service for those loads and what it ends
16 up paying is basically their network transmission
17 service rate. And so the equivalent of that, if
18 you ask WAPA what their equivalent network
19 transmission service rate is, it calculates out to
20 about what their firm point-to-point is, and that
21 number today is \$2.95 a kilowatt-month.

22 Q. (MR. GRUMAN CONTINUING) Thank you. In
23 your rebuttal testimony on page 12, you refer to
24 some WAPA transmission costs, I believe, in
25 relation to wind. Now, what you've just previously

1 discussed concerning the Tilton project, are we
2 talking about the same WAPA transmission costs or,
3 if they're different, if you could please explain?

4 A. They're different.

5 Q. Please elaborate.

6 A. Sure. Because what we're currently
7 talking about are these costs that we've added into
8 the Illinois proposal are for network service for
9 us to serve our load. And so if we talk about how
10 we serve our load, if we don't have enough
11 transmission and generation, we basically have to
12 take service from Western to basically be able to
13 serve our load.

14 When we look at this project down in
15 Hettinger, this wind project, we look more at
16 delivery of energy, and what happens is if we go
17 down to Hettinger and we look at the 230 system
18 that's down there, we have 50 megawatts of rights
19 that we have on that transmission system. There's
20 some upgrades that are occurring. That number is
21 expected to go to 75 megawatts of rights we'll have
22 on that system.

23 But from an energy standpoint, what
24 happens is the energies want to flow to the south
25 if you look at the path that comes out of

1 Hettinger, and ultimately one of the network
2 upgrades that was required was a phase shifting
3 transformer to keep those flows off the IS. If you
4 can't do something to keep those flows off the IS
5 from an energy standpoint, depending who the
6 offtaker is, just to get that energy to serve your
7 customers, whether it's ours or somebody else's, is
8 a charge that somebody potentially could have to
9 incur from WAPA.

10 Q. Earlier you were talking about WAPA
11 transmission costs related to the Tilton purchase.
12 Are these costs applicable solely to the Tilton
13 purchase, or why or why not?

14 A. They would be applicable to any off-system
15 resource. So depending where we would add new
16 resources or new transmission facilities on our
17 system, we could basically show we have additional
18 deliverability capability or resources that could
19 serve our load.

20 Q. If you could please reiterate, what is
21 MDU's existing transmission agreement with WAPA?

22 A. We have a transmission sharing agreement,
23 is what it currently is, and that agreement expires
24 in December of 2015. It has in it historical load
25 points for both MDU and also WAPA's customers that

1 it serves as a part of that agreement, so you go
2 back and I think the last time the exhibits were
3 updated, I think, is like -- it was in the late
4 '80s, early '90s. And in that we take a look and
5 say that was the amount of load that each party
6 said that they had at that time.

7 Those exhibits haven't been updated since
8 then, so what WAPA has done is they said your load
9 has grown and you've above those historic levels.
10 And because we're above those in certain places,
11 they said you have to take network transmission
12 service.

13 Q. When was this agreement first signed
14 between MDU and WAPA?

15 A. I think it's been signed and extended a
16 few times. I think the particular date on this one
17 goes back, I think, to '88 -- or '83 or '88, but
18 there would have been one that would have preceded
19 it.

20 Q. Now, you mentioned that your WAPA
21 transmission agreement between MDU and WAPA
22 expires. Is there any potentiality that it could
23 be renewed?

24 A. No. We've tried that. It's one of those,
25 it does not have any extension rights that are part

1 of that, and so there's no evergreen clauses,
2 there's no renewal terms that are part of that.
3 It's a hard-set to expire. And it's one of those
4 agreements, at least looking with FERC, of saying,
5 you know, it doesn't -- from the standpoint of open
6 access it's a different rate, so the places that
7 agreement will expire will basically be taking
8 replacement service if there is reciprocal from
9 each other's tariff.

10 Q. Just so I understand correctly, so the
11 fact that it can't be renewed, is that because WAPA
12 doesn't choose to renew it or -- if you could
13 please explain.

14 A. Two parts. WAPA -- when we've entertained
15 them if there would be any way to do it, they have
16 said they're not willing to, and the other one is
17 looking at FERC with open access treatment of
18 tariffs, I think we believe that it's not capable
19 of being basically renewed, is what it would be,
20 because there's no extension terms in it.

21 Q. If it had been renewed, though, would that
22 have eliminated the WAPA transmission costs related
23 to the Tilton project -- or the Tilton proposal?

24 A. You still have -- ultimately in the future
25 have to go off and look at what your position is

1 for transmission resources and also generating
2 resources in the future. One of the places that we
3 get with Heskett Station, you know, we've not
4 talked about retiring a unit there, but ultimately
5 if we end up having a unit retirement that occurs
6 at Heskett Station or anywhere on our system,
7 that's actually less resources that we have that
8 can serve our load in the future. So what this
9 does is it allows us to offset costs today, plus it
10 offsets additional -- you know, the potential for
11 other unit retirements in the future.

12 Q. Thank you. If you could please now -- one
13 moment.

14 Will WAPA pay MDU for sharing MDU's
15 transmission facilities, or is this a one-way --
16 just one moment, please. Okay. Excuse me. I'll
17 reiterate.

18 Will WAPA pay MDU for sharing MDU's
19 transmission facilities, or is this a one-way
20 street whereby MDU will pay and WAPA will not?

21 A. There's two pieces working this. One is
22 the WAPA transmission service agreement when it
23 expires, you know, there's certain service of loads
24 that MDU receives on the WAPA system, and the other
25 one there are certain loads that WAPA's -- some of

1 their REC members receive.

2 One of the other agreements that works in
3 conjunction with this is actually the Basin common
4 use agreement. So under that common use agreement
5 there is another transmission sharing agreement
6 that Montana-Dakota has where the co-ops have made
7 investments on our transmission system in various
8 places that also allows the co-ops to basically or
9 Basin to basically wheel power across our system.

10 So what we've looked at, is this a
11 reciprocal thing where we're basically going to pay
12 the same dollars back to each other just under a
13 different tariff, the answer is no, because we'll
14 take a lot more service than they will. And the
15 other one is Basin's members largely will be able
16 to use the terms under the common use agreement to
17 basically continue to wheel that power.

18 Q. Is that entirely the logic that's behind,
19 I guess, your answering this question, or is there
20 something else, as well? Is there any other logic
21 that you're aware of?

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

23 Q. I guess I mean, is this the entire story?
24 I mean, is there something out there also that's
25 part of this analysis?

1 A. We have two transmission service --
2 basically two transmission agreements that we have
3 with WAPA and Basin. One is there's an agreement
4 we've talked about that's this transmission service
5 agreement that expires in 2015. The other one is
6 the common use agreement. They both basically
7 provide, as far as it goes with the co-op loads,
8 the REC loads, which is what we're talking about,
9 is their reciprocal revenue that we'll receive when
10 the WAPA IS transmission agreement expires that we
11 have for the WAPA tariff agreement. That basically
12 the two of them work in conjunction today and they
13 largely will be left with just the common use
14 agreement. Once we get to 2016 it will be the only
15 one left, and that does provide abilities, because
16 of investments that Basin and its members have made
17 on our system, that they can basically wheel power
18 in certain places across our system.

19 Q. Thank you.

20 A. And that one does not have an expiration
21 date to it so it continues to evergreen.

22 Q. Before in your slide you discussed that
23 with the current federal budget constraints it
24 seems likely that the production tax credit, if it
25 is extended, will be at a reduced funding level.

1 Again, what's the basis for your statement?

2 A. That's just my opinion.

3 Q. Then please proceed to page 17 of your
4 rebuttal testimony. Once you get there, lines 14
5 through 16, if you could please review that.

6 A. I've read it.

7 Q. You state that no adjustments were made in
8 the EGEAS modeling assumptions for the Tilton
9 proposal related to the deliverability issues that
10 the company had with this resource. Why didn't the
11 company include such adjustments?

12 A. I think at the time of the modeling that
13 was done, the largest unknown dealt with MISO's
14 capacity construct. And so from the standpoint of
15 having a resource that far off our system, there
16 really is no way to quantify if and how a resource
17 that's located that far away could be used on our
18 system. In hindsight, looking at how an adjustment
19 could be made, and that would be as if you wanted
20 this proposal to be considered a grandmothers
21 agreement, we would have had to add in the cost for
22 a transmission service request from Illinois back
23 to MDU, which could have been added into the
24 modeling as we did -- it could have been added back
25 into the modeling for an additional cost we could

1 have done post the analysis.

2 Q. If you could please now proceed to page 23
3 of your rebuttal testimony. And once you get
4 there, if you could review lines 1 through 9.

5 A. I've reviewed it.

6 Q. Thank you. Now, you state that -- I guess
7 I'm quoting -- changes in MISO membership, whether
8 that is MDU or others, could impact the ability to
9 utilize capacity from Illinois. For example, MDU's
10 only connection to MISO is contingent upon OTP's
11 continuation as a MISO member. If either MDU or
12 Otter Tail were to withdraw from MISO, MDU would be
13 required to secure a transmission service request,
14 if available and if economic, to show a
15 deliverability of the capacity resource from
16 Illinois to North Dakota to utilize capacity from a
17 Illinois resource.

18 So I guess my first question is, does MDU
19 have any plans to exit MISO?

20 A. At this time we do not.

21 Q. And what is your -- what is MDU's
22 knowledge of OTP's plans to remain or withdraw from
23 MISO?

24 A. I would say that would be Otter Tail's
25 plans, but that they have over potential issues

1 provided letters to MISO at least the last few
2 years addressing the potential for withdrawals if
3 certain things would occur or if there were certain
4 changes.

5 Q. So I guess it's fair to say it's somewhat
6 speculation as to whether or not OTP is going to
7 withdraw from MISO; is that correct?

8 A. Correct.

9 Q. Under that contingency, if OTP were to
10 withdraw, would that require FERC approval?

11 A. For Otter Tail to withdraw from MISO?

12 Q. From MISO, correct.

13 A. Yes, it would.

14 Q. And also probably the Public Service --
15 North Dakota Public Service Commission, the local
16 regulators, as well; would that be correct?

17 A. Possible. I'm not sure as far as what all
18 the procedures would have to take place.

19 Q. Historically, and I believe you alluded to
20 this before, are you familiar with other
21 withdrawals from RTOs?

22 A. Not neighboring utilities, but from others
23 within the MISO footprint.

24 Q. I guess from what you remember, could you
25 provide some examples?

1 A. The most recent one that's occurred is
2 with First Energy.

3 Q. If you could please elaborate, I guess,
4 what you remember about that situation.

5 A. That First Energy elected to withdraw from
6 MISO and join a neighboring RTO, being PJM.

7 Q. Under that scenario, what did -- how did
8 FERC respond? What did they do under that
9 scenario? How did they deal with the adverse
10 effects of the withdrawal, more specifically?

11 A. The part that I'm familiar with dealt with
12 their cost obligations, and so monitoring pieces
13 from a transmission owner's perspective, there are
14 certain cost allocation expenditure treatments that
15 they basically had to agree to continue to pay and
16 fund for a period of time post their withdrawal.
17 That's the part I'm familiar with.

18 Q. Thank you. If you could -- well, on the
19 same page on lines 10 through 11, if you could
20 review that.

21 A. I've reviewed it.

22 Q. Thank you. Now, just reiterating, you
23 state, "Just a year ago, any network resource in
24 MISO was fully deliverable across the footprint for
25 capacity obligation purposes." Isn't it true that

1 under MISO's proposed locational capacity market,
2 purchases that were executed prior to a certain
3 date would continue to be counted towards meeting a
4 capacity obligation?

5 A. Only if they have a transmission service
6 request, is my understanding.

7 Q. And then what's -- there's a threshold
8 date involved, as well; correct?

9 A. July 15, 2011.

10 Q. Thank you. That's my next question. I
11 guess in hindsight, had MDU signed the agreement to
12 purchase the Tilton power in 2010 when it was
13 offered, wouldn't MDU be able to count that
14 capacity towards its obligation?

15 A. Can you repeat the question again, please?

16 Q. Certainly. In hindsight, if you would
17 have signed the Tilton proposal, on that date
18 wouldn't you have been able to avoid -- or wouldn't
19 you have been able then to be able to count the
20 capacity towards your obligation notwithstanding
21 this new proposed scheme by MISO?

22 A. No. My understanding is that if we would
23 have signed that prior to July 15, 2011, we also
24 would have had to have a corresponding transmission
25 service agreement, so we would have had to have

1 done that study to see if it was available, plus we
2 would have had to incur those additional costs.

3 Q. All right. I'm going to ask you to go to
4 your other testimony, your direct testimony, which
5 again is?

6 MR. KUNTZ: 107.

7 MR. GRUMAN: Thank you. 107.

8 Q. (MR. GRUMAN CONTINUING) On page 9 of 107.
9 Once you get there, I would like you to review
10 lines 13 through 22, please.

11 A. I've reviewed it.

12 Q. Thank you. My question is, since we're in
13 a situation of excess capacity, shouldn't we be
14 taking advantage of MISO capacity purchases rather
15 than building plant? And please explain.

16 A. We actually have taken advantage of some
17 of that already, because as we've looked at
18 securing some of our short-term requirements, we
19 actually have made purchases in the current
20 voluntary capacity auction. The issue with
21 longer-term auctions is the amount of time if
22 pricing would go to CONE and you would have a
23 shortage, the question is how quickly can you react
24 to that, that if it goes deficit and you haven't
25 made plans or depending how long you depend upon

1 that, you really become at the mercy of what that
2 market price is. And as we've looked at the
3 potential for the EPA pending rules and as far as
4 potential for impacts and where those capacity
5 margins go, we can end up seeing how quickly they
6 could be depleted.

7 Q. With that, what you just said, that could
8 be reconciled somewhat by the fact that the PPA
9 proposal was for 20 years, you could
10 correspondingly go back to Tilton and say we would
11 want something shorter to be able to hedge against
12 the concerns you just testified to; isn't that
13 correct?

14 A. I'm sorry. Can you repeat that again,
15 please?

16 Q. Certainly. What you had indicated as far
17 as taking advantage of a high capacity or the type
18 of situation where you have more capacity than
19 typical, you discussed about the -- and then you
20 discussed about CONE and the situation of the
21 variability as time goes on, it's my understanding
22 at least from previous testimony, with this PPA
23 being 20 years, it doesn't allow you to react
24 accordingly. However, if this Tilton PPA -- if you
25 would have asked for it to be shortened from 20 to

1 some other period of time, three, five, or
2 something like that, wouldn't that somewhat hedge
3 against the concerns you just testified to?

4 A. It ends up hedging until the time that
5 that shorter term then expires, and then as far as
6 at that point, you're once again subjected to what
7 that current market price is, where if there's a
8 high amount of demand, usually means the supply
9 costs are more expensive.

10 Q. Are you familiar with the cost per
11 kilowatt-month in the first year of the 88 megawatt
12 peaker?

13 A. I am not.

14 MR. GRUMAN: Just one moment, Your Honor.

15 Q. (MR. GRUMAN CONTINUING) It's my
16 understanding, however, that you could probably
17 calculate it pretty quick, but you would have to
18 use probably some trade secret material to do so,
19 isn't that correct, to answer my question?

20 A. I don't think it would be trade secret. I
21 think it would be public.

22 Q. Okay. And that's great. Then it's
23 public. But that's something you could calculate
24 right now?

25 A. Yeah, we would just take the revenue

1 requirement and what fixed costs and divide that by
2 the capacity times 12.

3 Q. Do you have that value, or is this going
4 to take a lengthy period of time?

5 A. It would take me a few minutes to end up
6 finding the appropriate number, and I would end up
7 needing a calculator. It is not in one of the
8 exhibits that I have in front of me, so I would
9 have to go get an additional document.

10 JUDGE WAHL: Mr. Gruman, I don't want to
11 interrupt your train of thought, so hang onto it.
12 It's sufficiently close to the noonhour that I
13 would entertain willingly a request to recess for
14 lunch.

15 MR. GRUMAN: I think that's a very good
16 idea. I make such a request, Your Honor.

17 JUDGE WAHL: Accordingly, we will be in
18 recess until one o'clock.

19 (Recess taken at 12:00 p.m. to 1:01 p.m.)

20 JUDGE WAHL: Let's be in order, please.
21 Mr. Gruman, when you're ready.

22 MR. GRUMAN: Thank you, Your Honor.

23 Q. (MR. GRUMAN CONTINUING) Just to
24 reiterate, Mr. Neigum, what will this 88 megawatt
25 peaker cost per kilowatt-month in the first year?

1 A. In looking at the revenue requirement,
2 this is from MDU 109, and taking out for variable
3 O&M and also the cost of gas that was a part of the
4 \$14.4 million revenue requirement, comes up with a
5 monthly capacity cost of \$12.75.

6 Q. Thank you. What is the expected capacity
7 market revenue the company will receive for this
8 capacity from MISO on a kilowatt-per-month basis in
9 the first year?

10 A. The first year we would use this capacity
11 to serve our load, so basically we'd self-schedule
12 it in. There's no cost. So basically what the
13 cost of the capacity is is what the cost that our
14 load pays because we don't have an excess.

15 MR. GRUMAN: One second, Your Honor.

16 Q. (MR. GRUMAN CONTINUING) So just to
17 clarify, does that -- are what you're indicating to
18 me is that MDU will receive no market revenue from
19 MISO for this capacity?

20 A. We use the capacity for our own resources.
21 We talked about how we've got a deficit of 149
22 megawatts, so it's used to reduce that, so we'll
23 basically use all that capacity in the first year
24 to meet our requirements. So the only way you get
25 into revenues in the auction is if you had an

1 excess.

2 Q. So just to be certain, so the customers
3 are going to be paying the full \$12.75; is that
4 correct? There's not going to be any kind of
5 offset from MISO revenue or anything like that?

6 A. That would be what has been indicated
7 would be included in the rate base for the revenue
8 requirement.

9 Q. Thank you. Before it was indicated that
10 there's a similarity between fuel costs between a
11 20-year PPA, i.e., Tilton, and this 88 megawatt
12 peaker. I guess our question is that, there is one
13 differentiation, though, isn't there, between that
14 similarity in that if you have the fuel costs and
15 you have a 20-year PPA or a 10-year PPA, when
16 that's done, isn't it in fact that you can reassess
17 in that if you own this peaker, you're going to be
18 set on that fuel price because you own the system,
19 whereas a PPA, once that expires, you can reassess
20 to other technology where it would be more
21 efficient or there would be some type of fuel
22 that's cheaper; would that be correct?

23 A. You are right. At the end of a PPA, I
24 mean, you're going for replacement, but then you're
25 left to whatever the market might be for

1 alternatives, which could be the same fuel source
2 or it could be something else.

3 Q. Mr. Neigum, is it true that as part of
4 this project, you're going to be -- you're
5 requesting to put in a 10-inch gas line; is that
6 correct?

7 A. That is the request, yes.

8 Q. Okay. What is the actual line that would
9 be needed to service this 88 megawatt peaker? Is
10 it something less than 10?

11 A. I believe the size of the pipe just to
12 serve one 88 megawatt turbine is an eight-inch
13 pipeline.

14 Q. What are your future plans, I guess, for
15 this further capacity that's provided by the
16 larger-diameter pipe?

17 A. The pipeline, itself, is proposed to be --
18 I think it's 24 miles in length, and so in sizing
19 that pipe and the incremental cost, part of that
20 is, as we talked about, the optionality at Heskett
21 Station, so we've looked at a couple things. One,
22 is the pipe sized large enough that we could
23 basically install two 88 megawatt resources at
24 Heskett Station based upon that pipe, or the other
25 one is, if needed, there would be sufficient volume

1 in the pipe to basically repower both the Heskett
2 boilers on natural gas.

3 Q. Before previously in your -- I guess our
4 cross-examination, you discussed WAPA network
5 service costs. Does the requirement to pay for
6 WAPA network service depend on locations?

7 A. It does. That's how the calculation is
8 done, is to look at both pockets.

9 Q. Could you further expand, what locations
10 in particular?

11 A. I think we would look at about 20 load
12 pockets when we looked at this previously, so
13 basically Bismarck-Mandan is a pocket, and because
14 of the transmission route, that it stretches all
15 the way from the Wishek-Ellendale area all the way
16 up to Beulah, is kind of the one pocket. Now,
17 Dickinson is kind of a pocket by itself. You get
18 into that Bowman area, is kind of an area by
19 itself. And most of the little western -- major
20 western cities are all pockets by themselves.

21 Q. When you said Bismarck-Mandan pocket, is
22 Heskett included in that pocket then?

23 A. Yes, it is.

24 Q. In one of your previous exhibits, I
25 believe it's in part of MDU 111, you discuss the

1 WAPA costs. You included these WAPA costs in your
2 exhibit and you charge it to other MDU -- or I
3 guess my question is: Were the WAPA costs in
4 particular -- were they -- that were included in
5 your exhibits, were they charged to other MDU
6 purchases that are currently expiring, for
7 instance, We purchases -- or that We purchase
8 agreement you had discussed?

9 A. It wouldn't be a charge to a resource even
10 if it deals with, you know, the Illinois proposal.
11 It's an offset to costs that we would incur. So
12 it's really -- rather than a charge to the
13 Illinois, it's really an offset, more of a benefit
14 to the Heskett location. As far as the We Energies
15 proposal, it expires in May of 2015, and so from
16 the standpoint of we're still under the existing
17 WAPA transmission service agreement so the charge
18 isn't applicable.

19 Q. What is the present -- the net present
20 value difference between Tilton and the 88 megawatt
21 peaker if you exclude the newly developed IS WAPA
22 charges?

23 MR. KUNTZ: Objection to the form of the
24 question in terms of newly developed. This is an
25 existing WAPA tariff. It just becomes applicable

1 to us upon the expiration of our contract. This
2 isn't a, quote, newly developed charge.

3 JUDGE WAHL: Mr. Gruman.

4 MR. GRUMAN: I'll strike "newly" then if
5 you want to proceed with answering the question.

6 THE WITNESS: Could you repeat the
7 question, please?

8 Q. (MR. GRUMAN CONTINUING) What is the
9 present value -- net present value difference
10 between Tilton and the 88 megawatt peaker if you
11 exclude the developed IS WAPA charge -- or excuse
12 me -- the WAPA charges?

13 A. I don't have that number in front of me.
14 I would have to calculate it.

15 Q. Okay. If you could please calculate. How
16 long would that take to calculate?

17 A. The sheet that I had that developed the
18 page is basically on my laptop. That would be the
19 simplest way.

20 MR. GRUMAN: Perhaps the best way to
21 proceed then is, I could probably just recall you
22 later, you could do your calculation. If that's
23 acceptable, Mr. Kuntz.

24 MR. KUNTZ: That's fine.

25 MR. GRUMAN: Okay. I have no further

1 questions then.

2 JUDGE WAHL: Ms. Jeffcoat-Sacco.

3 **CROSS-EXAMINATION**

4 **BY MS. JEFFCOAT-SACCO:**

5 Q. I just had a couple questions about the
6 IRP and the potential repowering or whatever of the
7 Heskett. And, as I understand, that particular
8 advantage or benefit was not necessarily quantified
9 and run through the IRP, but don't you think
10 perhaps it should be since it's so central to, you
11 know, least cost and resource -- utility of your
12 resources?

13 A. The optionality is in a sense modeled
14 inside the pricing for the combined cycle resource
15 today, because the combined cycle resource pricing
16 assumes that you've got a greenfield site, so it
17 basically looks as that optionality exists. So
18 from the standpoint of if you just wanted to put a
19 combined cycle resource, in a sense that pricing
20 represents -- if it's a greenfield, you could put
21 that on without any of the synergies or benefits of
22 repowering with Unit 1 at Heskett Station.

23 The place you get into is there's nothing
24 that's economically driving the retirement of the
25 Unit 1 boiler, and so what happens is you basically

1 have to replace that resource still with something
2 else. So where you really get into the place is
3 when something comes along, whether it's
4 environmental or if there's cost or equipment-type
5 pieces that say maybe we need to look if it makes
6 sense to put the dollars into this project at that
7 time versus now taking that optionality piece. And
8 that's where the savings will come of saying we
9 could potentially use that as an option in the
10 future based upon, you know, when we get to the
11 time to retire that plant.

12 MS. JEFFCOAT-SACCO: Thanks. That's all I
13 have.

14 JUDGE WAHL: Questions from the
15 Commission. Commissioner Clark.

16 COMMISSIONER CLARK: Sure. Thank you.

17 **EXAMINATION**

18 **BY COMMISSIONER CLARK:**

19 Q. And thanks, Darcy, for your testimony. I
20 think I basically understand, especially after some
21 of Mr. Gruman's followup, with regard to the
22 resource adequacy construct and how MDU will
23 recover its costs. And from what I understand
24 is -- you described self-scheduling. What that
25 means is that, to the degree that you're still

1 short on capacity -- or at least to the degree that
2 all of the capacity will be used by MDU for its
3 purposes, you just recover that straight from the
4 ratepayers, you don't have to interact with any
5 sort of capacity market; is that --

6 A. Correct. The self-scheduling removes it
7 from the market, so that if you -- in a sense, if
8 you have capacity and load all in the same zone,
9 you can net those out so that all that goes off to
10 the auction is either load that you're short or
11 excess capacity that you have that would get put
12 in.

13 Q. Do you have a sense for how this is going
14 to fly basically? As I understand it from our past
15 discussions we've had on separate proceedings, MISO
16 to a great degree is responding to -- in setting up
17 a resource adequacy construct, is responding to
18 challenges that it's faced on its eastern side of
19 its border where you have utilities, especially in
20 restructured states, jumping to the PJM, which has
21 a more full, robust capacity market. Is there a
22 risk that if MISO isn't able to sell this at the
23 FERC, that it is forced to adopt a more robust
24 capacity market, and does that have an impact on
25 the scenario that you've laid out?

1 There's a lot of speculation in that
2 question, I realize. I'm just trying to assess
3 risk, if they decide, nah, you need more PJM-like
4 market.

5 A. I think there's two risks that are out
6 there. One is that the rules, themselves, are
7 still not approved by FERC. The other one that's a
8 part of this is exactly the mechanisms of how the
9 auction will work isn't called out in the tariff.
10 It comes up in a business practice manual. So MISO
11 is still working through that through their supply
12 adequacy working group. They're still talking
13 about those mechanics as far as all the pieces.
14 You know, there are parts that are called out in
15 the tariff that kind of get the bookends to it.

16 And the other one that's a part of this
17 is, as you talk about the restructuring states,
18 there's sort of a discussion or place around that
19 portability of capacity, and there's sort of that
20 study that's on capacity portability, particularly
21 with the PJM scene, what does that mean and kind of
22 what are the implications. So some of that kind of
23 looks at what's -- what are those limits -- they're
24 almost like another zone, what are the limits as
25 far as how much can move across and how much

1 actually will. And you sort of end it and to play
2 speculation, as well. If somebody sits on one of
3 those seams, can they take a resource and basically
4 jump back and forth across that seam every year and
5 then what effect does that have?

6 Q. So when you earlier in your answer
7 described the risk that I seek, could you give me
8 an example of what would be a bad outcome if the
9 risk happens?

10 A. I guess the one that I -- the example at
11 least I had in my rebuttal testimony, we talked
12 about on the overview slide, is, of looking at zone
13 1 where we're in and if we end up becoming capacity
14 deficit and it becomes some situation where you're
15 limited on how much you can import/export from a
16 neighboring zone either because of those transfer
17 limits or they don't have anything, and so the
18 bookend on that on the high end is right now it
19 looks like the auction, itself, either starts at
20 CONE, the cost of new entry, on the top end or some
21 multiple of CONE. So if it starts at CONE in your
22 deficit, that's basically what load you're short is
23 going to pay.

24 Q. Okay. So --

25 A. And then the flip side, you go to another

1 zone and if they have an excess or some ability to
2 move across the seam that could move it in, the
3 question is, well, what's the pricing in this other
4 zone.

5 Q. And that's the risk you're laying out
6 if --

7 A. Correct.

8 Q. -- say, the Illinois option was --

9 A. And that's the one we could basically buy
10 capacity in Illinois --

11 Q. Right.

12 A. -- we have to basically sell it into that
13 zone and get paid whatever that zone price is. We
14 have no load so it can't self-schedule.

15 Q. What happens to the CONE penalty money?
16 Does MISO then take that money and go out and
17 procure --

18 A. MISO doesn't --

19 Q. -- capacity, or how does -- who gets it?

20 A. That's kind of one of those if you look
21 for that, I don't know that there's necessarily a
22 party that gets it. It's more of an incentive.
23 But if you get into a deficit, any surplus dollars
24 that are collected, even though the market could be
25 short because MISO doesn't build anything, it's

1 really meant to incentivize people to basically
2 look to bid stuff. Timingwise the question is how
3 fast you could get something in if you got the
4 CONE. But the other one is the dollars,
5 themselves --

6 Q. But if somebody is writing a check out to
7 somebody --

8 A. It goes back -- well, there's places from
9 some of these hedges, so if there's extra dollars
10 collected, they go back to someone who's got
11 grandmothered agreements, who's got these hedges.
12 And then if there's still dollars that are left, I
13 believe it goes back to anybody who has capacity in
14 that zone.

15 Q. Okay. So it doesn't write down MISO's
16 administrative costs?

17 A. No, it doesn't go there. It goes back
18 to -- the excess goes back to the generators or to
19 fund some of those other hedges across some of the
20 existing zones.

21 Q. Are you able to tell me, after 2015 when
22 the proposed plant would go online, what would
23 MDU's fuel mix by resource be both in terms of
24 capacity and energy? Is that contained in the
25 testimony somewhere?

1 A. I believe it's contained -- on a
2 capacitywide it's in the IRP. I think we looked at
3 that.

4 Q. Excuse me?

5 A. In our integrated resource plan.

6 Q. In the IRP. Okay.

7 A. Yeah. I don't have that right in front of
8 me, but it's contained within there.

9 Q. Does the IRP also identify at the end of
10 the time period that's identified, is it 2030,
11 something like that, where the number of new CTs
12 are proposed to be added, at least as of this time,
13 what the end -- say looking 20 years down the line
14 fuel mix would be?

15 A. That's not contained in there. I guess
16 that isn't one of those pieces when we look at the
17 resource plan of saying, particularly that far out,
18 that those are all the ones that affect -- that's
19 why every two years we basically update it to
20 rewrite it of saying, okay, more on the short-term
21 basis, but then, you know, those 20 years out or
22 more of kind of -- you know, what's a trend or at
23 least help you decide, you know, the types of
24 things to continue to look at.

25 Q. Sure. I'm trying to figure out how

1 exactly to ask this question. And I think it gets
2 to something that Commissioner Kalk had brought up
3 earlier about the idea, how do you decide to add
4 incremental pieces as opposed to just building a
5 larger plant right now. I look ahead at that --
6 what would be proposed in the IRP right now and if
7 you add up the different CTs, I think it comes out
8 to about 300 megawatts ballpark over the next, say,
9 18 years.

10 A. Mm-hmm.

11 Q. To what degree does MDU do calculations to
12 figure out are we better off adding these
13 incremental CTs or are we better off just simply
14 being part of a bigger project right now? How is
15 that cost done? There must be some sort of net
16 present value calculation.

17 A. Well, I think from the standpoint of
18 bigger projects, as Ms. Stomberg said, we've looked
19 at those, you know, and there's at least three coal
20 projects that we've looked at. You know, the other
21 one of taking a look, there's nothing on the
22 horizon, we're not seeing anything.

23 If you look at building excess additional
24 capacity, certainly there's a revenue requirement
25 that goes with that, so you've got to recover it

1 from somebody and the question is, is there enough
2 in the market, whether it's in pool sales of energy
3 or somebody is willing to purchase that capacity at
4 your cost to justify making that bigger investment.

5 We kind of look at the time now, I think
6 we're kind of into a balanced approach. If we need
7 150 megawatts, you know, we're not trying to
8 overbuild. We're trying to build this 88. We've
9 gone off and we've looked at 25 megawatts of demand
10 supply because that reduces that requirement, as
11 well. 70 percent of those payments go back to our
12 customers who participate, and so now we're back
13 into just, you know, that smaller amount that's
14 left that either, you know, potentially we would
15 find a shorter-term capacity agreement, maybe we
16 find -- you know, we decide we want to keep it in
17 the auction for a little bit is the best place, but
18 we're looking at 6 percent from kind of a risk
19 management versus having this 25 percent number
20 that's out there.

21 So I think it's more of a balanced
22 approach is where we've gone based upon how we got
23 here, what we've done in the last few years and
24 then, you know, trying to be conscious that there
25 are other changes that may be in front of us.

1 Q. As much as anything, it sounds like it was
2 just a practical reality that you were butting your
3 head up against with regard to larger central
4 generating units; is that right?

5 A. Well --

6 Q. Feasibility, it wasn't working out so you
7 skip by it, is that --

8 A. I don't know if you skip by it. I mean,
9 from the standpoint -- we have a need, so the
10 question is how do you continue to fill that need,
11 and if you don't have anything particular on the
12 horizon that says here's, you know, more of a
13 concrete plan for a long-term larger resource,
14 either you're just continuing to always just keep
15 buying from others and you just kind of keep hoping
16 that it's out there, and as we've gotten -- we've
17 gotten to 25 percent of our need is now in that
18 basket.

19 You know, we're in the other place. If we
20 look at our generating units and we take out Unit 2
21 at Glendive, which came online in '03, all the rest
22 of them are more than 30 years old. So now you've
23 got this whole other generating mix except this one
24 resource that's all 30 years old or greater, and
25 that's not getting any younger, and the more we

1 keep pushing it out, we have no way that we're
2 backfilling in for what at some point is going to
3 become another potential need.

4 Q. Could you follow up a bit on our energy
5 efficiency discussion that we had had earlier? I
6 understand Ms. Stomberg's response in part to be
7 that, look, the commissions in our area haven't
8 engaged in a lot of at least encouraging sort of
9 social engineering. Nonetheless, describe to me
10 how energy efficiency is taken into consideration
11 because it is from a -- as a cost-benefit analysis,
12 isn't it --

13 A. Correct.

14 Q. -- so that you're -- and I think I recall
15 this correctly from the IRP, and you can affirm it,
16 but basically all cost-effective energy efficiency
17 is considered; is that correct? So, in other
18 words, is it considered a resource just like any
19 other, but if it doesn't meet a cost-benefit test,
20 it's not accepted? Is that --

21 A. Right. There is a cost-benefit test that
22 goes with those. And some of the way -- my
23 understanding of how we look at energy efficiency,
24 you can do programs that have a cost and
25 particularly those are compared like a new

1 resource. Really the ones that we define and we
2 have a program cost or there's some rebates we give
3 back to customers, we can quantify and say, here
4 was this cost to put in and here's an actual number
5 of customers who signed up for that. So that kind
6 of has a cost-benefit test and it goes in as a
7 resource.

8 You know, indirectly if we do advertising
9 campaigns or just because, you know, other programs
10 exist, customers make those choices themselves, so
11 we don't try to quantify that or take credit for
12 it. So if we look at the number of energy
13 efficiencies, we're really just talking about the
14 programs that we're sponsoring, there's either
15 dollars for or there's some way that we can get
16 some sort of measurable number of who those
17 individuals are.

18 And one of the things we're doing or is in
19 the resource plan, you know, we've included a goal,
20 which I think is a quarter of a percent per year.
21 And it probably seems small compared to others.
22 You know, we're looking at doing a potential study
23 particularly in Montana and looking to have some
24 applicability of that back as far as what we find,
25 you know, at least to the entire system. So we are

1 doing more, you know, but we're looking to do some
2 studies of more of the broader potential programs,
3 find their costs, and see what the penetration
4 rates.

5 Q. I'm just trying to put some context.
6 Sometimes North Dakota is criticized for not being
7 as aggressive on EE as some other states and I
8 always tell folks it's not that we don't -- I think
9 this is true, and you can confirm it -- it's not
10 that our utilities don't look at it, it's just that
11 the margins are so much less because our energy
12 costs are so low that we adopt all cost-effective
13 energy efficiencies, just that the number of
14 programs that qualify under that cost-effectiveness
15 test are not the same as they would be if you had
16 15-cent or 20-cent a kilowatt-hour rates; is that
17 correct?

18 A. Correct. I think, as Ms. Stomberg said,
19 based upon the prices, I mean, it becomes more of a
20 customer choice. And from the indirect side, the
21 customers make those choices because they're not
22 programs we sponsor, though, when they change out
23 CFLs or sometimes depending on appliances that they
24 put in, you know, we just don't take credit for
25 those. They're doing it, they're occurring out

1 there, but the way that we're doing our tracking,
2 we don't have those indirects.

3 Q. You had mentioned in the North Dakota wind
4 proposal that it was for energy only. Is there no
5 capacity credit that would be given for that
6 whatsoever?

7 A. That -- you put in a generator
8 interconnection request, you have two types. One,
9 it can be an energy resource, an ER designation, or
10 the other one can be a network resource, NR. If
11 you end up being a network resource, you get
12 capacity credit for it. If you're an energy-only
13 resource, you only get energy. So there's a little
14 bit of different modeling study that's done to see
15 what the impacts are on the system. And that
16 resource is just an energy-only resource, an ER
17 designation.

18 Q. Can you give me an idea in -- how often do
19 you expect this CT to run? And you can define your
20 own sort of time parameters, but, as I understand,
21 it's primarily a -- it's been described as a
22 peaking resource. Sometimes we hear about some of
23 our utilities' intermediate resources and then you
24 hear about base load resources. Could you kind of
25 define how often you expect this to run?

1 A. I think I indicated that based upon the
2 modeling that we had in EGEAS and if we look at the
3 resources that are added in 2015, we're expecting
4 something around that 10 percent number.

5 Q. Thanks. Just one or two last questions.
6 You had quite a bit of discussion with Mr. Gruman
7 about the transmission costs that were added in the
8 WAPA transmission IS charges on the confidential
9 side-by-side comparison. We don't need to go off
10 the record because I'm not going to ask you
11 anything specific about that. But is there
12 anywhere in the testimony submitted that tries to
13 add in the potential MISO transmission costs, or is
14 that where you were getting into discussion about
15 you just don't know because it's -- the rules of
16 the road aren't known yet if you went with the
17 Illinois plan?

18 A. If we would have went with the Illinois
19 project and in order to have that financial hedge
20 ability, so if we would have entered into the
21 agreement prior to July 15th of 2011, in order to
22 make sure that there was no pricing difference from
23 what we had for capacity in Illinois to basically
24 what our load would pay, we would have to get a
25 transmission service request.

1 Q. Okay.

2 A. So we go out, we put in, we get that
3 study, it ends up being a NAN-type rate, so you'll
4 basically pay the MISO Schedule 7 for firm
5 point-to-point transmission plus any upgrades that
6 are required. And if you go back and look at what
7 the current MISO Schedule 7 is, it's \$2.44 right
8 now.

9 Q. Okay.

10 A. So then if you multiply that times the --
11 if we just assume 88 megawatts, not the whole 176,
12 and multiply that by 88 megawatts and then times 12
13 months, it ends up being -- today's dollars that's
14 \$2.69 million.

15 Q. I'm going to take one more -- it's my last
16 question. I'm going to take one more run at this,
17 because although there was a lot of discussion on
18 it, I'm not sure that I'm a hundred percent crystal
19 clear on it, which is the last point on your WAPA
20 transmission service, page 22 of your PowerPoint,
21 which talks about generating resource at Heskett
22 could be used to offset the need for WAPA
23 transmission service. Can you describe that just
24 one more time, this idea of an offset --

25 A. Sure.

1 Q. -- because I'm almost thinking -- and if
2 you're adding a resource right in the middle of
3 kind of the western edge of MISO where you've got
4 this and you may be interacting a lot with your
5 WAPA IS, that you're actually using more of their
6 service, but --

7 A. If we go back and let's -- we talked about
8 we end up doing this study to see what level of
9 megawatts or load that we can serve from our
10 resources, so if we end up taking Bismarck-Mandan,
11 we look at this area, and what we'll end up doing
12 is we basically take all the WAPA facilities and
13 disconnect them from ourselves, so we don't have
14 the disconnections at east Bismarck, and we take
15 the connections at Heskett. There's the 231 that
16 goes through there. We take those out.

17 Q. So just because you have a load sink right
18 here and you happen --

19 A. Yep.

20 Q. -- to have Heskett here, you can just
21 serve it locally?

22 A. Correct, because you don't -- you're not
23 relying on transmission. And so if we look at
24 Bismarck-Mandan, it becomes strategic because it's
25 our biggest load pocket, and if we get a resource

1 here and it can offset some of those costs, we're
2 finding some way, you know, to mitigate that
3 effect, you know, that we're expecting to happen
4 come the beginning of 2016.

5 COMMISSIONER CLARK: Okay. Got it. Thank
6 you.

7 JUDGE WAHL: Commissioner Cramer.

8 COMMISSIONER CRAMER: Thank you.

9

EXAMINATION

10 **BY COMMISSIONER CRAMER:**

11 Q. Thank you, Darcy. Tony pretty well
12 exhausted my line of questioning, so what I'm going
13 to do instead is -- well, I'm going to ask one
14 specific question. Do you recall or can you remind
15 me what the incremental cost of those two extra
16 inches of pipe are to feed?

17 A. I think it's in the neighborhood of
18 one and a half to two million dollars.

19 Q. Well, my question is -- and maybe I'll
20 make a statement, and I think it's been alluded to.
21 The best way I can express it is to make this
22 statement.

23 Personally watching all of this, listening
24 to this and reading all this, it looks to me like
25 MDU is preparing to build a combined cycle plant in

1 Mandan. To be honest, that's what it looks like to
2 me. And I get the sense that we don't want to talk
3 about it like that, but rather talk about this
4 smaller plant, but just in case, and so I'm a
5 little bit, I guess -- I'm not frustrated, mind
6 you, but I'm a little bit curious, is my instinct
7 accurate, and if it isn't, fine, but if it is, why
8 don't we just talk about a combined cycle plant in
9 Mandan?

10 A. Well, from my standpoint and my knowledge,
11 that's not what we're looking at doing at this
12 point of advocating at least at this point, you
13 know, building that combined cycle there. What we
14 looked at is, when we looked at places to build
15 potential generating sources, we looked at a number
16 of sites, and certainly if we end up looking at the
17 Heskett site, because we have other generation
18 there, the big benefit we get is the synergies, and
19 the other one is at some point -- we're not saying
20 this is occurring, but at some point something is
21 going to happen with that Unit 1 boiler. We don't
22 know when it's going to happen or what, but if that
23 ends up being the case, there is an ability if we
24 locate a resource there, not that we're saying
25 we're looking at doing that or that's the next

1 thing you're going to see from us, we're basically
2 saying there's an optionality that we could
3 capture.

4 Q. So then at this point is it prudent to
5 approve a 10-inch pipe when an 8-inch pipe will do
6 for what we're talking about at this point?

7 A. And I think when you look at the
8 incremental cost of the pipe, you know, it's small.
9 If we get into a situation where we start looking
10 at where to add another turbine or if we had to
11 look at -- you know, something would cause us to
12 look at repowering one of the existing Heskett coal
13 boilers on gas, we've got that capability for just
14 a few dollars incremental we put in the ground on
15 top of this. Otherwise, we're back looking at
16 spending much more significant dollars in upgrades,
17 you know, either pressure on the pipe or putting in
18 a second pipe. So it seems to be at least a
19 prudent piece because of optionalities that it
20 gives us down the road at this point in time.

21 COMMISSIONER CRAMER: Okay. Thank you.

22 JUDGE WAHL: Further questions from the
23 Commission. Commissioner Kalk.

24 COMMISSIONER KALK: Thank you, Your Honor.
25

EXAMINATION

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BY COMMISSIONER KALK:

Q. Thank you, Darcy, for your testimony.

I think Commissioner Cramer and I are thinking the same, exact thing. Why don't we just say we're going to build something big and build it now. I mean, that's where I'm at. You talk about 43 megawatt plants coming every so many years to meet a growing demand. I guess I'll back up and come back to that.

Walk me through how you take your integrated resource plan, submit it every two years, then you submitted a request for proposals, the RFP, and then how you tied that back in together. I know you went through it again, but can you kind of give me the Reader's Digest version again?

A. Sure. And I think -- you know, certainly every two years would go around and basically prepare the integrated resource plan. I think because of recent years because of the capacity need that we have, that we have now and also when we were looking at the expiration of the Antelope Valley Station agreement, we certainly got into RFPs at the same time because they're an option to

1 what would be a self-build that you would have in a
2 resource plan, so you do that comparison.

3 If you end up in a situation where you
4 would have an excess amount of capacity, there
5 certainly wouldn't be any need to be going out for
6 an RFP at that point in time because you're not
7 looking to contract something. You're asking for
8 bidders to give you bids to something that you
9 don't need.

10 Q. Sure.

11 A. So based upon --

12 Q. When you made the decision to go out with
13 the RFP on this particular project, if you will, is
14 that somewhere in the record what that looks like,
15 because it seems to me like what you're asking for
16 really -- obviously in terms of what you get and
17 some of the things it looks like now maybe you got
18 that maybe if you would have wrote in a different
19 proposal, you maybe wouldn't have got some of those
20 projects.

21 A. We tried to write it as broad as we could,
22 you know, and I think we were looking for resources
23 from 25 to 225 megawatts. We were looking for a
24 start date which was in 2015 because that's when we
25 knew our other agreement ended. We were looking

1 for five-year terms with five-year extensions that
2 were a part of that.

3 From a resource side we said anything,
4 we'll look at energy, we'll look at capacity, we'll
5 look at coal, we'll look at wind, we'll look at
6 demand response. We tried to cover as much as we
7 could, not exclude things, to basically say -- find
8 out what the market had available.

9 Q. But were you looking for a peaking
10 resource in that request for proposal?

11 A. No. Not specifically, no.

12 Q. But then how do you get from that to what
13 this is now, a peaking resource? It seems to me
14 that if you needed a peaking resource, that should
15 have been what your request for proposal asked for.

16 A. The place you get to a peaking resource
17 then comes back to when you actually do the model
18 and you take a look for what your capacity need is
19 and you take a look at your existing energy
20 resources, and as you dispatch them, it will
21 basically determine the type of resource. I mean,
22 do you need more base load-type energy, do you need
23 more peaking-type energy, and basically based upon
24 the mix that you have basically determines the type
25 of resources the model is going to want to pick.

1 Q. Okay. That all makes sense. But then you
2 go back to just the reality of you're sitting in
3 the MDU office and you've got a place sitting over
4 at Heskett that's got -- that has very good gas
5 supply, that has very good electric transmission,
6 that has the best water supply, that has the best
7 chance to get permitted. You already know what you
8 want to do. I mean, that's the part I'm having
9 trouble meshing in. Walk me through how that ties
10 in.

11 A. Well, when we take a look at resources,
12 and so if we step back when we had our 2009
13 integrated resource plan, it was showing we wanted
14 to pick a combustion turbine in 2015. At the time
15 we had done some real high-level screening, maybe
16 pins on a map that said here's six places we looked
17 at on our service territory if they were
18 self-built.

19 We get around to this and we end up
20 knowing the model is still probably going to want
21 to pick a peaking-type resource. So if we're going
22 to go off and look at sites, what we'll do is we'll
23 go off and we'll try to develop maybe the more
24 defined costs that end up saying here's a little
25 more drill-down on some of these potentials. And

1 we actually had three sites that we did more of a
2 detailed analysis, basically looking at the
3 pipeline cost for gas, the electrical
4 interconnection and also the cost of the turbines
5 and the various outputs they got. So we basically
6 had three sites that we basically developed more
7 knowledge on.

8 Q. Is that the Linton and Richardton sites?

9 A. Correct. Yep. So we looked at those, as
10 well. And then in that you come back to, okay,
11 which one makes the most sense, and that's where
12 you end up with the synergies and at least
13 opportunities that we develop at Heskett Station.
14 Not to say we want to develop a combined cycle, but
15 that's --

16 Q. That's the part I'm trying to understand,
17 how you get to that decision process. If you
18 intuitively know that's where you're at, you come
19 to that, it makes good sense, why don't you just
20 proceed with that and then find what it takes to
21 back it up instead of trying to run it through all
22 these models to get you back to where you know
23 you're headed to -- you want to go anyway?

24 A. I think that's where we're at with the
25 models. They end up showing the economic analysis

1 of it as far as from a least-cost side what have
2 you determined for your assumptions and then
3 basically going and trying to come up with some
4 dollar difference either between sites or saying
5 from an economic what's the best site.

6 Q. I think that's where it gets interesting.
7 As a Commission -- or as an individual
8 Commissioner, sometimes I don't think I need all
9 those models telling me all these numbers. I need
10 leadership from the company to say that this is
11 what we think, this fits our intangibles, this is
12 what we need, this is the best fit, and then you
13 come in and make your case, I mean, because this is
14 a case for 88 megawatts right now, but this could
15 easily, in my opinion, be a case for 176 megawatts
16 to delay future costs, build it all at once, and
17 that's, I guess, part of the -- when you submit an
18 IRP, are you looking for feedback from us on it or
19 are you just filing it? How do you view that
20 yourself?

21 A. At least for myself, you know, I think we
22 submit it and we hope we get comments back. I
23 don't think there's a requirement that we get
24 feedback.

25 Q. Because we've had that discussion

1 ourselves in the Commission, a lot of -- okay, the
2 place where I would go through an IRP is a rate
3 case. If you give me an IRP and I start giving you
4 comments what not to do, what to do, then it's a
5 very interesting scenario, so that's something I
6 think we probably have to take off somewhere about
7 the role of the IRPs, because I don't know that
8 it's appropriate for us to comment at that time on
9 those IRPs.

10 A. One of the things we've also done is --

11 Q. But it's inferred in here, I think, that
12 because you submitted the IRP and we didn't say
13 anything, that we agreed with it.

14 A. Well, one of the other things we've done
15 is when we do our IRPs, we have a public advisory
16 group, so we end up getting folks, you know, from
17 various parts of our service territory and we've
18 had invitations out. In the past we've had folks
19 from, you know, the Commission staff that have
20 participated in that, so at least to be able to try
21 to get some input or have some dialogue along the
22 way as we end up, you know, creating this plan.

23 Q. Okay. Let me look through here a little
24 bit. So if I was to ask just the one question of
25 what's the best piece of data that you have that

1 says that this is the best plant to build at this
2 place and time -- or at this place and at this
3 time, what would that be? Is there one model
4 that's better? Is there one report? Is there
5 something that really says this is the best thing
6 to do now?

7 A. And for myself, I would go back to it's a
8 combination of a number of pieces of information.
9 And so it kind of drives into almost that gut
10 feeling as you look at all the potential places
11 that we have, I mean, the amount of synergies that
12 we get, and it's also connected to our largest load
13 pocket that we have, and the benefit that that
14 provides for reliability particularly as we look at
15 growth that occurs and interruptions that can occur
16 on the transmission side, it continues to show at
17 least where our largest load pocket is that we've
18 got resources to serve that.

19 Q. What would be the -- and you might not
20 know this, it's kind of off the cuff, but the
21 transmission grid in that area, what would be the
22 max size of generation you could put in this pocket
23 with what the current transmission system would
24 allow? Do you know that?

25 A. Well, from -- and this gets back a little

1 bit to the types of facilities that Montana-Dakota
2 has.

3 Q. Let's say natural gas.

4 A. I know. But the places -- most of our
5 transmission is 115,000 volts or less, and so if we
6 end up taking a look at something that's 115,000
7 volts, we're really talking resources that are
8 maybe up to a hundred, maybe 120 megawatts.
9 Otherwise, you've got to upgrade the lines to 23
10 kV.

11 Q. You must be an electrical engineer. Okay.
12 So 120, give or take?

13 A. That's what I would say. Otherwise, we're
14 into some bigger transmission upgrades, and that's
15 the benefit of putting something at Heskett, is
16 there's a large 115 kV loop that goes around the
17 area that basically connects all the load in the
18 area to serve all that.

19 Q. So if this 88 megawatt plant gets built
20 and you repower the boilers, if you will, what
21 would that rough megawatt amount come to?

22 A. I think it just adds basically 88 above
23 what's currently over there, so we're at a hundred
24 plus 88, about 188.

25 COMMISSIONER KALK: Okay. Thank you very

1 much, Darcy.

2 THE WITNESS: You're welcome.

3 JUDGE WAHL: Further questions from the
4 Commission? Followup, Mr. Kuntz?

5 MR. KUNTZ: Thank you, Your Honor.

6 **REDIRECT EXAMINATION**

7 **BY MR. KUNTZ:**

8 Q. Mr. Neigum, in response to a request by
9 Mr. Gruman, you gave a first-year monthly cost --
10 revenue requirement cost for the 88 megawatt CT at
11 \$12.75 per kW; is that correct?

12 A. Correct.

13 Q. Did that include the cost that would be
14 avoided, the WAPA transmission charges, if this
15 project were built at Mandan as opposed to off
16 system somewhere?

17 A. No, it did not.

18 Q. And what would that reduce -- do you have
19 a number that that would reduce that 12.75 by
20 equivalent that you considered that offset?

21 A. Yes. That number would be an offset of
22 \$3.32 a kilowatt-month. Therefore, the net cost
23 would be \$9.43 a kilowatt-month.

24 Q. Thank you. In response to some questions
25 by Commissioner Clark, you described your

1 understanding of the MISO capacity market and how
2 it would work and if you were at deficit and there
3 wasn't sufficient capacity, that you could buy on
4 that market, you could be subject to these
5 penalties of CONE, cost of new resource or whatever
6 it's called. Okay?

7 A. Correct.

8 Q. Do you have an understanding or is the
9 MISO proposal clear so that you end up in this
10 auction and that zone is short of capacity, period,
11 and you get into a peak situation where because of
12 that shortage, despite the fact that everybody has
13 paid their CONE, and, as Commissioner Clark put
14 out, that's just money, that doesn't create
15 generation, how is MISO proposing -- or what
16 happens if you're one of the deficit utilities and
17 you weren't able to buy sufficient capacity credits
18 on that annual auction, how are your customers
19 going to get served in that one peak day in the
20 event that the capacity in that zone is less than
21 what the demand is on that particular day? Is that
22 addressed in the MISO proposal, to your knowledge?

23 A. I have not seen that in the tariff, and so
24 I think from the standpoint it's -- certainly if it
25 would occur, it does two things. One, it would

1 just drive a system emergency, and it's entirely
2 likely that everyone could basically have to make a
3 corresponding reduction if you were in a limiting
4 or emergency situation.

5 The other one ends up being, it certainly
6 could create some new rules as far as resource
7 adequacy goes and as far as priorities, I would
8 think.

9 And the other one that you end up with is
10 sometimes if you end up in a limiting situation,
11 depending upon congestion, depending if you've got
12 resources available, you may entirely likely be
13 able to serve that load. But if you're talking
14 about resources that are deficit over a large zone,
15 you may have some other limitations that basically
16 are impacting the ability to serve load someplace
17 else on the system.

18 Q. But one way or another, some load is going
19 to get impacted if the zone is short of capacity;
20 is that correct?

21 A. Correct.

22 Q. And so that load might be impacted based
23 upon, like you mentioned, these pockets where
24 there's capacity shortages; it could be based upon
25 systemwide, based upon some sort of priority system

1 in terms of users? Is that a possibility?

2 A. Correct.

3 Q. Or it might be based upon who happens to
4 be short, there might be priorities? If you were
5 one of the utilities that has to be short, you
6 might be looked to to shed load before some other
7 utilities which has self-scheduled sufficient
8 capacity? Is that also a possibility?

9 A. That's possible.

10 Q. There was a question by Commissioner
11 Cramer, I believe it was, about the size of the
12 pipe relating to the need -- or the vision for a
13 combined cycle turbine at Heskett. Does the size
14 of the pipe relate more to the possibility of a
15 combined cycle unit as opposed to a second CT? Can
16 you describe that?

17 A. I can. The sizing of the pipe is more
18 driven by the ability to locate a second turbine
19 there or to repower the Heskett boilers. If you
20 look at a combined cycle resource, it typically is
21 just taking the heat that's available from the
22 simple cycle turbine and turning that into steam
23 and energy. So unless you put supplemental firing
24 in that unit, there's no additional fuel that's
25 required.

1 Q. So the exercise of the pipe then would add
2 flexibility in terms of the option to add a second
3 88 or some lesser size combustion turbine there
4 without going and having to put in a second pipe?

5 A. Correct. It doesn't drive the decision of
6 using that as a potential combined cycle location.

7 MR. KUNTZ: That's all the questions I
8 have, Mr. Neigum.

9 JUDGE WAHL: Mr. Gruman.

10 MR. GRUMAN: Thank you.

11 **RE-CROSS-EXAMINATION**

12 **BY MR. GRUMAN:**

13 Q. Mr. Neigum, do you have in front of you
14 MDU 101, the application for this 88 megawatt
15 peaker? If not, I can just approach and show you
16 mine.

17 A. I do not have it in front of me.

18 MR. GRUMAN: May I approach, Your Honor?

19 THE WITNESS: Oh, do I? Oh, I do have it.
20 I'm sorry.

21 Q. (MR. GRUMAN CONTINUING) Oh, okay. If you
22 could proceed to page 4. Now, towards -- let me
23 know when you get there.

24 A. Yes.

25 Q. Towards the bottom, I believe the third

1 line from the bottom, there's a \$15 million amount,
2 and if you look at the footnote --

3 A. On which page?

4 Q. Page 4 and it would be MDU 101.

5 A. Yes.

6 Q. There's a \$15 million amount that's
7 indicated. If you look at the footnote at the very
8 bottom of the page, I believe that indicates for an
9 eight-inch line. So would it be correct that the
10 cost of the pipeline for an eight-inch line would
11 be \$15 million? Would you agree with that?

12 A. I'm not the one who put this together. In
13 looking at that, it looks like the \$15 million
14 would correspond to the eight-inch pipeline.

15 Q. If you could next proceed to page 7 of
16 this same document. Now, second line from the
17 bottom indicates a \$15.9 million figure plus a \$2.5
18 million figure for \$18.4 million in total. Would
19 you agree that that is the cost for a 10-inch line?

20 A. In looking at that, that's what -- the
21 conclusion that I would draw.

22 Q. So 18.4 minus 15 is 3.4; is that correct?

23 A. That would be.

24 Q. So would you agree that to answer
25 Commissioner Cramer's question for the incremental

1 cost between an eight-inch line and a 10-inch line,
2 that that would be \$3.4 million?

3 A. I would defer that question to somebody
4 who prepared these estimates.

5 Q. Who would be best to be able to qualify
6 that?

7 A. I would say Mr. Morman or Mr. Welte.

8 MR. GRUMAN: All right. I guess the
9 second thing is just a bookkeeping matter. The IRP
10 has been referenced, it was indicated by Commission
11 staff that perhaps that should be part of the
12 record. I spoke briefly with Mr. Kuntz. What I
13 propose is that we include as an Exhibit RSH-12 and
14 by judicial notice bring in the 2011 MDU IRP, and
15 when you're ready, I'll reference. It's actually
16 filed in our PU number, PU-11-158.

17 JUDGE WAHL: Mr. Kuntz.

18 MR. KUNTZ: We don't have any objection
19 obviously to the foundation of this exhibit. I
20 guess I'd like some understanding of the purpose
21 for which it would be offered so it's clear in
22 terms of how it's being used. I'm always reluctant
23 when people are taking big documents and dumping
24 them into the record and then something is grabbed
25 out of there without any context or opportunity to

1 explain in terms of how it's being used.

2 There has been reference to it in terms
3 of, you know, what's been shown in it in terms of
4 resources, and I'm fine with that purpose or any
5 other purpose that's been referenced in the
6 hearing, but I wouldn't want it used for something
7 that hasn't been discussed in the context of the
8 hearing.

9 JUDGE WAHL: In other words, what is its
10 relevance?

11 MR. KUNTZ: Exactly.

12 JUDGE WAHL: Well, the problem, of course,
13 is, Mr. Kuntz, if we're going to take official
14 notice of the document, then what, are you also
15 going to attempt to define a limited purpose?
16 Because once it's in, it's in, and -- I think. I
17 don't think if you agree -- well, if I agree that
18 it's relevant and it comes in, then I'm not -- how
19 do we -- how do we limit the purpose?

20 MR. KUNTZ: I think from the context of
21 which it's being offered. If it's being offered
22 for any of the purposes that's been discussed here,
23 I have no objection at all, but as Ms. Stomberg
24 indicated, this document is huge and somebody can
25 go off and -- frankly, I have not read the IRP, but

1 there's plenty of people in the room who have, are
2 more familiar with it than I. I'm not sure what
3 all the sections are that are in there and how --
4 somebody could take a section that's completely
5 irrelevant to what's been discussed in the hearing
6 and try to make something of that in the findings
7 or arguments later on.

8 JUDGE WAHL: That's the nature of being a
9 lawyer, Mr. Kuntz. Well, so, Mr. Gruman, what's
10 the relevance? Relevant to what issues -- relevant
11 to what questions at issue in this case is the
12 document sought?

13 MR. GRUMAN: Well, I mean, part of what
14 was referenced was the -- I believe a fuel cost
15 portfolio, and I think it was -- the way it was
16 answered was that's in our IRP. Plus, I mean,
17 Commission staff had asked that it be included into
18 the record, so I didn't -- I guess I didn't expect
19 any objection to this, so I'm not -- I guess that's
20 the best way to answer this. It's not like I'm
21 completely -- I have to have this within the
22 record. It's just, again, I didn't expect an
23 objection, so --

24 JUDGE WAHL: Ms. Jeffcoat-Sacco.

25 MS. JEFFCOAT-SACCO: Yeah, I think I

1 probably brought it up, but about 50 percent of the
2 questions today have been responded to with some
3 analysis from the IRP.

4 JUDGE WAHL: Yeah.

5 MS. JEFFCOAT-SACCO: Did it cover this
6 part of the resource, did it cover DSM. So if I
7 were to go try to look up, okay, how much DSM was
8 really in the IRP to try to understand part of the
9 transcript, I've got a document now that's not in
10 the record and so that's why I said I think it
11 needs to be in the record.

12 JUDGE WAHL: That was my sense actually,
13 that there have been numerous references to the IRP
14 and so I'm inclined to think that the document can
15 -- can come in, that is, the Commission can take
16 official notice of the document and use it with
17 reference to its evaluation of the evidence that
18 relates to the IRP. That seems to work for me.
19 And if in the Commission's order it appears that it
20 is used for some other purpose which you can
21 reasonably argue is irrelevant or which somehow the
22 Commission has abused its official notice, then I
23 think you have your appeal, Mr. Kuntz.

24 MR. KUNTZ: Thank you, Your Honor.

25 JUDGE WAHL: Mr. Gruman, anything further

1 for the record in that regard?

2 MR. GRUMAN: No, Your Honor.

3 JUDGE WAHL: All right. So then the
4 Commission will take as Exhibit -- the Commission
5 will take -- let me see. The Commission will take
6 official notice of the IRP, which is document -- or
7 help me here, Mr. Gruman. It's PU --

8 MR. GRUMAN: 11-158.

9 JUDGE WAHL: So is that the document
10 number? That's a case number.

11 MR. GRUMAN: It's a case number. It's
12 been filed within the docket, so what I'm
13 requesting is that --

14 JUDGE WAHL: Oh, so you don't have the
15 document number?

16 MS. JEFFCOAT-SACCO: We do not, but I'm
17 guessing it might be the only thing in there.

18 JUDGE WAHL: Oh, all right.

19 MS. JEFFCOAT-SACCO: Or close to it.
20 Right?

21 MR. GRUMAN: That's my understanding,
22 common protocol.

23 MS. JEFFCOAT-SACCO: Right. We give it a
24 case number.

25 JUDGE WAHL: I see. Okay. So the

1 Commission will take official notice of the IRP,
2 which is identified as Case No. PU-11-158 and which
3 will be identified as Exhibit RH 12. Is that
4 satisfactory, Mr. Gruman?

5 MR. GRUMAN: It is, Your Honor. Thank
6 you, Your Honor.

7 I do have further questions for Mr.
8 Neigum. However, I believe I'm just going to ask
9 them as part of my direct since he has to do some
10 calculations. So in that respect, I have no
11 further questions, Your Honor.

12 JUDGE WAHL: Followup, Ms. Jeffcoat-Sacco?

13 MS. JEFFCOAT-SACCO: We have no questions.
14 Thank you.

15 JUDGE WAHL: Followup -- Commissioner
16 Kalk.

17 **FURTHER EXAMINATION**

18 **BY COMMISSIONER KALK:**

19 Q. I just forgot to close the loop on the
20 question on the request for proposal. Is that in
21 the record somewhere right now? Is it in the IRP?

22 A. It's in the IRP. It was one of the
23 exhibits to the IRP.

24 COMMISSIONER KALK: Okay. Well, I would,
25 if that would be okay, like to use that in the IRP.

1 JUDGE WAHL: Further questions from the
2 Commission? Mr. Kuntz, followup --

3 **REDIRECT EXAMINATION**

4 **BY MR. KUNTZ:**

5 Q. One follow-up question. On page 7 of the
6 application you were asked questions regarding the
7 cost -- the estimated cost of the 10-inch pipeline
8 there being 15.9 million plus approximately \$2.5
9 million for the tap and border station at the
10 interconnection. Do you see that?

11 A. I do.

12 Q. And I believe Mr. Gruman asked you to add
13 those numbers up to get the 18.4 as the cost of the
14 10-inch pipeline; correct?

15 A. Correct.

16 Q. The \$2.5 million for the tap and border
17 station, would some or all of that, to your
18 knowledge, be incurred for an eight-inch pipeline,
19 as well? Would you need a tap --

20 A. Be the same.

21 MR. KUNTZ: That's all I have.

22 JUDGE WAHL: Followup, Mr. Gruman?

23 MR. GRUMAN: No, Your Honor.

24 JUDGE WAHL: Ms. Jeffcoat-Sacco?

25 MS. JEFFCOAT-SACCO: No. Thank you.

1 Q. Okay. Thanks. Would Mr. Morman have more
2 input?

3 A. Yes.

4 COMMISSIONER CLARK: Okay. Thanks.

5 JUDGE WAHL: Further questions from the
6 Commission?

7 Followup, Mr. Kuntz?

8 MR. KUNTZ: No, Your Honor.

9 JUDGE WAHL: Mr. Gruman?

10 MR. GRUMAN: No, Your Honor.

11 JUDGE WAHL: Ms. Jeffcoat-Sacco?

12 MS. JEFFCOAT-SACCO: No. Thank you.

13 JUDGE WAHL: Mr. Neigum, I think you are
14 finally done. Thank you very much.

15 THE WITNESS: Thank you.

16 MR. KUNTZ: Your Honor, as I indicated, we
17 have both Mr. Welte and Mr. Morman here, who
18 submitted prefiled testimony. We did not intend to
19 call them to summarize their prefiled testimony,
20 but they are available if the Commission or staff
21 has cross-examination questions for them. I can
22 pose a question, I suppose, with respect first to
23 Mr. Welte and then with respect to Mr. Morman.

24 JUDGE WAHL: All right. Mr. Welte,
25 Commissioners, any questions for Mr. Welte? There

1 are questions for Mr. Morman, though.

2 MR. KUNTZ: Mr. Morman -- would you like
3 questions of Mr. Morman?

4 COMMISSIONER CLARK: I'm sorry. Did
5 advocacy staff or Commission staff have any
6 questions for Mr. Welte?

7 MR. GRUMAN: Advocacy staff does not.

8 COMMISSIONER CLARK: Okay.

9 MS. JEFFCOAT-SACCO: No, we do not. Thank
10 you.

11 MR. KUNTZ: We would call Mr. Bob Morman
12 to the stand, please.

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

22 **ROBERT C. MORMAN,**

23 being first duly sworn, was examined and testified
24 as follows:

25

DIRECT EXAMINATION

1

2 **BY MR. KUNTZ:**3 Q. Now, Mr. Morman, would you state your full
4 name?

5 A. Robert C. Morman.

6 Q. And who are you employed by?

7 A. Montana-Dakota Utilities.

8 Q. What's your position with Montana-Dakota?

9 A. I am the manager of gas supply.

10 Q. And you submitted prefiled direct
11 testimony in this proceedings; is that correct?

12 A. Yes, I have.

13 MR. KUNTZ: We would offer Mr. Morman for
14 cross-examination.

15 JUDGE WAHL: Mr. Gruman?

16 MR. GRUMAN: I have no questions, Your
17 Honor.

18 JUDGE WAHL: Ms. Jeffcoat-Sacco?

19 MS. JEFFCOAT-SACCO: I have no questions.

20 JUDGE WAHL: Questions from the
21 Commission. Commissioner Clark.22 **EXAMINATION**23 **BY COMMISSIONER CLARK:**24 Q. I think you heard my question that I had
25 just asked. Can you talk a little bit about this

1 particular type of line, and it's specifically
2 designated as an electric supply line so in that
3 case it's not tariffed, it's just privately owned
4 by MDU; is that correct?

5 A. That is correct. At this time we're
6 building this pipe specific for electric generation
7 at Heskett Station.

8 Q. Okay. So the only tariff interaction that
9 you would have would be with the interconnection
10 with Northern Border; is that correct? I assume
11 they have some sort of tariffed product for that
12 type of interconnection.

13 A. Yes, at the -- at Northern Border
14 Pipeline, yes, they would.

15 Q. And then whatever the electric -- or
16 whatever the supply -- energy supply contracts are
17 with the gas marketers?

18 A. Correct.

19 Q. Okay. Is there an opportunity at some
20 point in the future, considering that there may be
21 excess capacity on that, to utilize it as a -- for
22 some sort of MDU gas supply for other customers?
23 Is that not feasible? What would the steps be if
24 that is feasible?

25 A. It runs right through our service

1 territory, as you well know. At this time we do
2 not have any plans to use it to feed any of our
3 existing customers or new customers. We're
4 currently serving everything from Williston Basin
5 Pipeline, they have adequate capacity, they have
6 the opportunity to expand, so at this time we have
7 no plans to utilize that as natural gas for gas
8 customers.

9 Q. I'm just trying to explore whether it
10 would be a potential revenue source to help offset
11 the cost of the line, itself. I mean, has that
12 been explored or looked at?

13 A. No, we did not look at that. If you use
14 it as a multi-user pipeline, you run into a
15 different set of regulations and guidelines, now
16 it's a multiple-user type deal, which is something
17 that we would have to consider at the time if we
18 see it feasible to use for natural gas.

19 Q. Do you have certain common carrier and
20 nondiscrimination obligations?

21 A. Yeah, exactly right. I believe there's
22 some guidelines that you fall into if you have
23 multiple users on it, being Montana-Dakota Utility
24 gas and the electric side.

25 COMMISSIONER CLARK: Okay. Thank you.

EXAMINATION

1

2 **BY COMMISSIONER CRAMER:**

3 Q. Well, along those lines, Bob -- and thank
4 you for being available. When you have a long-term
5 contract, say beyond three years, for gas, is it an
6 ironclad price or is it a price range, or how do
7 you do that to make sure that you're adequately
8 protected?

9 A. We can go out and ask for a number -- we
10 can ask for a fixed-price deal, we can ask for some
11 hedges. There's all kinds of financial tools out
12 there that you can hedge the gas for. You can play
13 the market -- purchase on the day of market if you
14 want. So really the marketers will pretty much
15 entertain anything you take to them. If you want
16 to -- if the electric boys desire to go to a fixed
17 price for the next two years or three years, I
18 believe you could find a contract that would -- a
19 marketer that would honor that contract.

20 Q. Probably not much beyond three for a
21 fixed-price, do you think?

22 A. Marketers get a little bit leery anytime
23 you go past three years, yes. Price a little
24 bit -- three years is typically as long. And
25 they're basically tied to NYMEX contracts, and

1 NYMEX really isn't forecast anywheres past the two-
2 to three-year time frame.

3 COMMISSIONER CRAMER: Very good. Thanks.

4 JUDGE WAHL: Further -- Commissioner
5 Clark.

6 **FURTHER EXAMINATION**

7 **BY COMMISSIONER CLARK:**

8 Q. Could you -- I had asked Andrea a little
9 bit about the nature of the firm and interruptible
10 rates that you're getting. Could you talk a little
11 bit more about that again, just fill in the blanks
12 for me with regard to how these particular
13 contracts as structured relate to what's firm and
14 what's interruptible?

15 A. What we look at doing -- being this is a
16 peaking unit, we have to have gas on call 24/7.
17 What we approached the marketers about was to
18 provide an RFP to address gas on a 24/7 call -- on
19 call, if you will. They will provide us gas on a
20 firm basis on a 24/7 basis. Interruptible really
21 is not an option if you have a peaking unit that is
22 required for their generation.

23 Q. And do you contract for a certain amount
24 of gas that will be used over the course of a given
25 time period, whether it's a month or a year or so

1 on and so forth, and does it -- you can start with
2 that question.

3 A. What we look at doing, we know what this
4 generation unit would use, we'd ask for on a daily
5 basis, we may need up to the 25,000 dekatherm per
6 day, and that's what we based our contracts on.

7 Q. Okay. And that's the capacity you're
8 purchasing?

9 A. Yes.

10 Q. And then the energy, itself, is that done
11 through a variety of instruments, hedges,
12 fixed-price contracts?

13 A. There again, we would put that back on the
14 market. The nice thing about doing with basically
15 a reservation fee for a marketer, we don't pay for
16 the capacity on a 365 days a year. We only pay for
17 it when we actually use it. There is an annual fee
18 we pay to the marketer for reservation of that.

19 Q. Okay.

20 A. If they have gas delivered to customer A
21 and we need it at our Heskett facility, they would
22 basically deliver the gas to us.

23 Q. They just have to guarantee that it gets
24 there?

25 A. That's what we are concerned about.

1 Q. And whatever they do on the days when
2 you're not using your capacity is their business --

3 A. That's correct.

4 Q. -- and that's how they float their model?

5 COMMISSIONER CLARK: Okay. Thanks.

6 JUDGE WAHL: Further questions from the
7 Commission? Followup, Mr. Kuntz?

8 **REDIRECT EXAMINATION**

9 **BY MR. KUNTZ:**

10 Q. Just one. Mr. Morman, could you clarify
11 the cost differences -- there's been some
12 questions -- between the 8- and the 10-inch
13 pipeline and including the cost of the Northern
14 Border tap?

15 A. The initial cost Mr. Neigum stated was
16 approximately 1.5 to 2 million, and it is correct,
17 it's in that range. I know there was some price
18 concerns through the 18.4 and the 5.9 that's in the
19 document for the eight-inch pipeline. I know once
20 the quotes came in, there was some additional, I
21 believe, accounting -- I wouldn't say errors, but
22 parameters that were identified by the electric
23 boys, and Mr. Alan Welte could speak more of that
24 than I can.

25 Q. But you have a tap in either instance -- a

1 tap charge on Northern Border at 2.5 million,
2 somewhere in proximity, whether it's an 8- or a
3 10-inch line?

4 A. It should be very similar in cost, yes.

5 Q. And the incremental cost between the 8 and
6 the 10 is approximately 1.5 to 2 million, you would
7 agree with Mr. Neigum on that?

8 A. That is correct. I believe somewhere of
9 1.67 -- \$1.6 million.

10 MR. KUNTZ: Thank you.

11 JUDGE WAHL: Mr. Gruman?

12 MR. GRUMAN: I have no questions, Your
13 Honor.

14 JUDGE WAHL: Ms. Jeffcoat-Sacco?

15 MS. JEFFCOAT-SACCO: No questions.

16 JUDGE WAHL: Any followup by the
17 Commission? Commissioner Clark.

18 **FURTHER EXAMINATION**

19 **BY COMMISSIONER CLARK:**

20 Q. Just quickly. And that 2.5 million
21 interconnection tap cost, is that a -- is that a
22 regulated tariff -- or is it a tariffed rate or is
23 it something that's just negotiated with Northern
24 Border.

25 A. That is pretty much a set rate they have

1 for their taps. Now, whether it's in their tariff,
2 I'm not exactly sure. It comes from their
3 engineering group, and I think that is -- that is
4 adjusted from time to time as costs either go up or
5 down -- or up, I should say.

6 COMMISSIONER CLARK: Got it. Thanks.

7 THE WITNESS: You're welcome.

8 JUDGE WAHL: Further questions from the
9 Commission?

10 Mr. Kuntz, anything further?

11 MR. KUNTZ: Nothing further.

12 JUDGE WAHL: Mr. Gruman?

13 MR. GRUMAN: Nothing further, Your Honor.

14 JUDGE WAHL: Ms. Jeffcoat-Sacco?

15 MS. JEFFCOAT-SACCO: Nothing. Thank you.

16 JUDGE WAHL: Thank you very much, Mr.

17 Morman.

18 I wonder -- Mr. Kuntz, anything further?

19 MR. KUNTZ: No, we have nothing further.

20 JUDGE WAHL: I wonder -- we're a little
21 bit previous to a recess, but I'm guessing we're
22 going to start down a long road, so let's -- why
23 don't we take -- why don't we take 10 minutes,
24 stretch our legs before we get started with
25 advocacy staff.

1 (Recess taken.)

2 JUDGE WAHL: All right. To begin, before
3 proceeding with advocacy staff's testimony, let me
4 comment for the record that I am advised that the
5 IRP, which is Exhibit RH 12 is best identified as
6 docket number 1 of Case No. PU-11-158.

7 With that, Mr. Gruman, when you're ready.

8 MR. GRUMAN: Thank you, Your Honor.

9 Advocacy staff calls Richard Hahn.

10 JUDGE WAHL: Mr. Hahn, as you have heard
11 me previously advise other witnesses, your
12 testimony is required to be under oath and I'm
13 required by law to advise you regarding perjury
14 before administering the oath. Perjury is a false
15 statement of material fact which you do not believe
16 to be true. In North Dakota perjury is a Class C
17 felony, punishable by a fine up to \$5,000,
18 imprisonment for a period of up to five years, or
19 both. Will you raise your right hand, please?

20 **RICHARD S. HAHN,**
21 being first duly sworn, was examined and testified
22 as follows:

23 JUDGE WAHL: Mr. Gruman.

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DIRECT EXAMINATION

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BY MR. GRUMAN:

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

A. Sure. Richard, middle initial S., last name Hahn, H-a-h-n.

Q. Mr. Hahn, have you had an opportunity to review all of the materials and listen to the testimony today concerning MDU's applications -- respective applications for advance determination of prudence and a certificate of public convenience and necessity?

A. Yes, I have.

Q. After review, have you formed opinions in those regards?

A. Yes, I have.

Q. If you could offer those opinions and also give to us your logic behind those opinions.

A. Certainly. In my direct testimony we reviewed the application for the -- I'll refer to them as a CPCN and an ADP, if that shorthand is okay. We noted that the company does appear to have a need for some new capacity. We agree that this need is driven primarily by expiring capacity contracts, but also by load growth when we reviewed

1 the company's load forecast and at a high level I
2 found that to be reasonable.

3 I also noted that there were certain
4 resources identified in the 2010 RFP, which I
5 believe are feasible and, when analyzed, result in
6 considerable savings relative to the proposed MDU
7 CT unit.

8 Because there are other feasible options
9 that will cost much less than the proposed project,
10 we think there's a possibility that the presumptive
11 presumption of prudence can be rebutted, and so my
12 testimony states that I do not believe that either
13 the ADP or the CPCN should be granted.

14 I do need to note that the two resources
15 that were found to be desirable were a North Dakota
16 wind project and an Illinois combustion turbine
17 project.

18 My testimony and my analysis focused
19 mainly on the Illinois combustion turbine project
20 or the purchase of the output of that unit because
21 it's a direct competitor to the proposed unit
22 that's -- for which the company is requesting a
23 CPCN and an ADP. So I'm not recommending that the
24 company be required to purchase the wind. I think
25 that is a decision or a debate that can be put off

1 to a later date. So I've focused my comments
2 mainly on this opportunity from an Illinois
3 combustion turbine.

4 And as far as some other comments, if I
5 might, Mr. Gruman.

6 Q. Please.

7 A. In my prefiled testimony I referenced
8 Chapter -- make sure I get this right -- 49-03.1-04
9 of the North Dakota code as setting forth the
10 provisions for a CPCN. The company has pointed out
11 graciously that this chapter of the code does not
12 apply to electric utilities and they've suggested
13 that Chapter 49-03 is the proper citation. I
14 acknowledge that Chapter 49-03.1-04 does not apply
15 to electric utilities. That fact, however, does
16 not change my testimony or my conclusions. The
17 five factors that I reference on page 7 of my
18 prefiled testimony are valid issues to explore when
19 considering an investment in a new power plant.

20 I would also like the opportunity for a
21 brief response to the rebuttal testimony that was
22 previously filed by the company. Ms. Stomberg made
23 reference -- her testimony -- her rebuttal
24 testimony made reference that a least cost is not a
25 requirement of the ADP or the CPCN. It also states

1 that the project has a presumption of prudence, and
2 I'll accept that, but I don't believe that should
3 be used to argue that the Commission can't and
4 shouldn't look at costs. I think the Commission
5 clearly should look at costs. And if the
6 Commission were to reach a conclusion that that's a
7 better alternative out there, I see no reason why
8 they could not direct the company to pursue that.

9 There were also claimed deficiencies due
10 to the conversion of the proposed combined cycle --
11 proposed combustion turbine and combined cycle
12 operation. We've already had lots of testimony on
13 this. I won't spend a lot of time on it. I just
14 wish to point out that that is an option that EGEAS
15 never picked. It only picked it in one high load
16 case and it picked it later in the planning period,
17 so I don't think it's really reasonable to say that
18 that's a benefit from the project. It may be, but
19 it's not been shown to be economic.

20 There are also claims about reliability
21 benefits from this proposed project. I have to say
22 that I have not seen any analysis of the
23 reliability of this area of the company's service
24 territory. The benefits of reliability are
25 quantifiable. They're not some unknown that can't

1 be quantified. In fact, utilities are required to
2 do reliability assessments of their system. In
3 fact, if they're deficient, they need to find a way
4 to fix them. And so this really wasn't something
5 that, in my view, the company studied or analyzed,
6 but I do think they should.

7 Lastly, I'll point out that there are two
8 significant benefits from this Illinois combustion
9 turbine that the company's rebuttal testimony
10 ignores. The first is that it was up to 176
11 megawatts and it would preclude the need to go out
12 next year for an RFP, which is something the
13 company has said they're going to do.

14 The LMPs in Illinois are higher than the
15 LMPs here in Montana, so there would be a benefit
16 to having market revenues at those higher prices
17 and also that the unit in Illinois has a lower heat
18 rate and lower variable cost, which would also
19 provide some benefits that are really not included
20 in the company's analysis.

21 In response to Mr. Neigum, I'll try to be
22 very brief, but there are a lot of points we
23 disagree with, but the two that seem to be the most
24 important relate to the deliverability of the
25 output of this Illinois combustion turbine either

1 for capacity and/or for energy purposes.

2 It was interesting in Mr. Neigum's slide
3 presentation today, there was an implication that
4 capacity prices will be higher in Montana, Dakota
5 territory than they will in Illinois. He didn't
6 come right out and say that, but he said that the
7 MDU -- the zone that MDU is in is short of
8 capacity. I disagree with that. I think if you
9 read the MISO transmission expansion plan, what it
10 says is that that area out by zone 1 is export
11 constrained and the area in Illinois is import
12 constrained. This is consistent with sort of the
13 conventional knowledge that power flows from the
14 west towards the east in MISO. And so in every
15 other area of the country where a capacity market
16 has been in place for a while, in an export-
17 constrained area, the prices are lower than they
18 are in an import-constrained area, so I believe
19 that that will be the case here. And so to the
20 extent that Mr. Neigum's analysis is inherently
21 based on that assumption, I have to point out that
22 that is an assumption that I would disagree with.

23 Regarding the transmission service that
24 they may not need to buy from WAPA, I must admit
25 I'm a little confused by this. When the company

1 raised this issue in its rebuttal testimony, we had
2 a call to discuss it and I was under the impression
3 that after that call that it had to do with loop
4 flow. And I was confused by that because WAPA's
5 tariff, even though they're not subject to FERC
6 jurisdiction, the Secretary of Energy has acceded
7 jurisdiction to FERC over their transmission rates
8 and these rigs do not charge for loop flow.

9 So I heard today really for the first time
10 that it's now the purchase of network service and
11 that network service depends somehow on the
12 difference between generation and load. I'm
13 further confused by that because network service is
14 a standard product that FERC -- all FERC OATTs,
15 that's open access transmission tariff, must have
16 and it's paid for by load, not by how much
17 generation you have. So it isn't clear to me that
18 these costs are appropriate and I'm not sure, quite
19 frankly, that they should be included, although I'm
20 a little bit at a disadvantage because I only
21 learned of some of this information today.

22 Then as far as the cost comparisons go, I
23 would like to bring up a couple of my exhibits.
24 The first two will be confidential, so I think we
25 need -- this won't take long, but I think we need

1 to go into a confidential session so we can discuss
2 Exhibits RSH-9 and 10.

3 JUDGE WAHL: All right. Give me a moment,
4 Mr. Hahn, please. I'll advise you when you may
5 proceed. You may proceed, Mr. Hahn.

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

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14 [REDACTED]

15 [REDACTED]

16 [REDACTED]

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[REDACTED]

JUDGE WAHL: All right. Give me just a moment, please. You may proceed, Mr. Hahn.

THE WITNESS: Lastly, Exhibit 11 shows graphically what we just talked about in Exhibit 10, and this is not a confidential exhibit because it just contains the summary results.

What you have is that in the first year the Illinois unit saved \$9 million. Now, this is a graph of cumulative net present value as it changes over time. Sorry for the technical term, but it's a convention that's used in most utility analyses, including the company's. And you can see how that rapidly increases to 59 million over the first 20 years and then declines to the \$30 million figure shown in Exhibit 10 over the full 40-year comparison.

I'm done with that exhibit, if you wish to

1 take it off the white board.

2 So I guess, in my view, these issues are
3 substantial. It does come down to perhaps whether
4 it's appropriate to include the WAPA transmission
5 costs. I will note that the net present value of
6 those costs that are contained in Mr. Neigum's
7 exhibit is approximately \$45 million, and that's a
8 big number. So it would be, I think, important to
9 make sure that that number is correct. And it
10 would be important -- as a preference, it would
11 have been helpful to us in our review had we known
12 this information sooner than we did.

13 With that summary, I will stop there and
14 that's the summary of my testimony.

15 Q. (MR. GRUMAN CONTINUING) Mr. Hahn, do you
16 have any recommendations for the Commission?

17 A. Well, beyond the recommendation in my
18 testimony, I do have some additional suggestions
19 for what I will call process-related.

20 It seems to me that the development of the
21 record and the analytics behind the company's case
22 could be improved quite a bit. We have seen here
23 where there were identified numerous issues with
24 some of the inputs, some of which the company even
25 agrees with, so I would suggest that in future

1 cases that those be reviewed and tightened up.

2 You know, as far as the filing of the
3 case, I think some of the analyses that have
4 surfaced later in the case would be a lot better
5 for everybody involved if they were identified
6 earlier. We went back at La Capra Associates and
7 reviewed the company's IRP and its filing in this
8 case and did not see any reference to either bad
9 reliability in the Heskett area or this issue of
10 WAPA transmission costs for out-of-state
11 facilities. And I guess if it does turn out to be
12 as significant as the company asserts that it is, I
13 think that should be done sooner in the process
14 rather than later.

15 And then I do have a concern about the RFP
16 process, itself. I think RFPs are great if they're
17 done right. The concern is obviously if you run an
18 RFP and people think it's not a fair RFP, they're
19 not going to respond. It's a lot of work to put in
20 a proposal for some of these things. And so if
21 certain out-of-state resources aren't going to be
22 given the same consideration, I think you should
23 tell people that upfront.

24 And I think that there's a sense of
25 objectivity that is sometimes helpful in running

1 these RFPs, and so in other instances I have seen
2 where an entity has been brought in, it's called an
3 independent evaluator, and they are brought in to
4 specifically oversee an RFP, and they are a third
5 party that has no ties to the company, to the
6 Commission or to any of the intervenors in the
7 case, and what happens is they structure it as a
8 fairly rigid RFP. The company can submit its
9 proposals, but it needs to do so in a sealed
10 envelope just like the other bidders do. Other
11 bidders are assured then that they have -- you
12 know, or can be assured if the process is developed
13 properly that they do have a fair and objective
14 chance to win a capacity and/or energy supply
15 obligation.

16 So I would suggest respectfully that that
17 be something that would be considered going
18 forward. I note that it provides protection to
19 both the company and the Commission and that, to
20 the extent that this is done properly, it ensures
21 that the decision that results from it is less
22 subject to challenge and it also gives developers a
23 fair opportunity to submit a real proposal.

24 Those are my additional suggestions, Mr.
25 Gruman.

1 Would you agree with that?

2 A. I would agree that the statute appears to
3 be silent on that issue, so it neither precludes it
4 nor specifically demands it.

5 Q. And, likewise --

6 A. And as I said earlier, I believe that it's
7 an issue that's certainly ripe for consideration.

8 Q. And, likewise, with respect to our
9 certificates of public convenience and necessity
10 chapters, both 03 and -- 03 and 03.1 of Chapter 49
11 or Title 49, none of those statutes refer to least
12 cost, do they?

13 A. No, they don't, sir.

14 Q. And let me -- would you agree with me that
15 it be possible that you might have more than one
16 project that could be prudent for a utility?

17 A. I suppose that's theoretically possible,
18 although I've never run across that.

19 Q. Let me use --

20 A. There's usually a preferred alternative,
21 if you will, Mr. Kuntz, and if it's close to
22 others, then that's fine.

23 Q. Let me try to use a loose analogy and the
24 Commission can decide how good of an analogy it is.
25 But let's say that I'm in the market for a new car

1 and I walk into my dealer and I say, you know, I
2 really want -- what's your least-cost vehicle here,
3 and they point me to this little subcompact that's
4 got the best mileage, lowest sticker price and
5 said, Here's your best deal. And if I said, I
6 think I'll pick that one, that could be considered
7 a prudent decision on my part, couldn't it?

8 A. Could be.

9 Q. But let's say that, you know, I'm kind of
10 a taller guy and I kind of think that, you know, a
11 little bigger car might be a little safer so I
12 would like -- you know, I don't want the
13 subcompact, I kind of want a middle-of-the-line
14 car, and based upon those considerations, even
15 though that's not the lease cost, that could still
16 be a prudent decision for me, could it not?

17 A. Certainly could.

18 Q. And let's say that then I think some more
19 and, you know, I live in North Dakota and
20 historically we get snow and ice in North Dakota.

21 A. Really?

22 Q. Once in a while. Once in a while I like
23 to carry some stuff around, you know, so instead of
24 this midsized car, I think I'd like to get an SUV
25 that I could drive, and it's a little more -- it's

1 more expensive than my subcompact and it's more
2 expensive than my midsized, but I think, you know,
3 there's considerations here that I can get with
4 this, I can't get with the other and so I'm going
5 to go with the SUV. So that could also be a
6 prudent decision for me, could it not?

7 A. Based on the number of SUVs I've seen
8 since I've been here, yes, sir.

9 Q. And would you agree with me that different
10 generation resources also have different
11 attributes?

12 A. Well, they do, but they're a good deal
13 more homogeneous than a Subaru Justy versus a
14 Cadillac Escalade.

15 Q. Well, some resources offer better capacity
16 attributes, others offer better energy attributes;
17 would you agree with that?

18 A. No. I mean, you get -- once you get
19 qualified for capacity in MISO either under today's
20 market or in the future market, each planning
21 resource credit or megawatt of unforced capacity is
22 equal.

23 Q. No, but if wind provides better energy
24 attributes than it does capacity and, likewise, a
25 gas combustion -- simple cycle combustion turbine

1 provides better attributes for capacity than it
2 does for energy production, would you agree if I
3 had a primary need for energy more so than
4 capacity, I might be more focused on the wind,
5 whereas if my primary need was capacity, I might be
6 more focused on the combustion turbine?

7 A. I don't know that that's the case. I
8 mean, there are differences in generation
9 technology. Wind is an intermittent resource and
10 relative to its nameplate, the amount of unforced
11 capacity credit that it's going to get is going to
12 be relatively low. I don't know --

13 Q. But its fuel costs are considerably less?

14 A. Its fuel costs are considerably less, but
15 the energy that it delivers to the grid has the
16 same value as energy from a coal plant. It's
17 valued at the LMP.

18 Q. And would you agree with me that some
19 pieces of equipment might be more reliable than
20 other types of equipment?

21 A. I will grant you that's certainly
22 possible, sure. But, again, in the MISO construct
23 that's taken care of by unforced capacity. So if I
24 have two hundred-megawatt resources and one has
25 a -- I'll just make them simple -- if one has a

1 forced outage rate of 5 percent, then it gets 95
2 megawatts, another hundred-megawatt resource that
3 has a 10 percent forced outage rate only gets 90,
4 but each megawatt of unforced capacity is equal.

5 Q. But in light of that consideration might
6 affect what I'm willing to pay for one versus the
7 other?

8 A. Well, you're only going to pay for
9 unforced capacity because that's all you're getting
10 capacity credit for.

11 Q. If I have two pieces of equipment sitting
12 side by side and one has got a little bit higher
13 rate than the other, I might be willing to pay more
14 for one than the other?

15 A. You will pay for unforced capacity, so
16 whatever that price is divided by the unforced
17 capacity, that's what you'll pay.

18 Q. If I've got two pieces of equipment, both
19 of them are priced at a million dollars, but one
20 has got a higher unforced capacity rate than the
21 other, which am I going to pick?

22 A. If capacity were your only criteria and if
23 your example were precisely what was proffered up
24 in the marketplace, then obviously you'd pick the
25 one with the lower forced outage rate.

1 Q. So that might be a little bit more
2 valuable to me than the other?

3 A. Right. But, I guess, my point is that
4 chances are that lower availability is going to be
5 reflected in the price, so it's unlikely you're
6 going to get one resource for a million bucks, if
7 that was your number, that was radically different.
8 I just don't think that would happen.

9 Q. Might also the location of where that
10 resource is also improve the reliability on my
11 system?

12 A. It could.

13 Q. Would you agree with me as a general rule,
14 the closer the generation source is to load, the
15 more reliable that makes your system?

16 A. Not necessarily.

17 Q. You don't agree with that from an
18 engineering standpoint?

19 A. No.

20 Q. So that you could have a resource that's
21 500 miles away that's serving your load that's all
22 connected by transmission, that is the same
23 reliability in your mind as a resource that's
24 located right next to that load?

25 A. I didn't say it was the same. Let me try

1 it this way. If I have a resource that's some
2 distance away, but it's connected by many 500 kV,
3 345 kV, 230 kV and 115 kV systems, then I'm not too
4 worried about deliverability. If, on the other
5 hand, I have a local resource that has a radial
6 line, for example, single radial line, that may be
7 less reliable than the resource that you're
8 purchasing from far away. So the point I tried to
9 make previously is that you can analyze these
10 things by doing reliability analyses, and I didn't
11 see that that was done in this case.

12 Q. But, again, using our example, if we've
13 got a resource that's a mile away from the load
14 with a radial line and one that's 200 miles away
15 with a radial line, which would you tend -- as a
16 general sense, tend to think is going to be more
17 reliable?

18 A. In your example, obviously the shorter
19 line, but I have to point out that I don't know of
20 too many 200-mile radial lines, so I'm not sure
21 that's a realistic example. But in your example as
22 you've presented it to me, with a one-mile radial
23 line connecting a single generator versus a
24 200-mile radial line, then the shorter radial line
25 would be more reliable.

1 Q. The closer you are to your load would tend
2 to make that less likely to be interrupted?

3 A. But only under the assumptions that are in
4 that question, which I'm not so sure I'd agree to.

5 Q. Did you hear Ms. Stomberg's testimony this
6 morning describing the incident that we had about a
7 month ago because of an outage out at Heskett?

8 A. I heard reference to something about both
9 Heskett units being out. I'm not sure I understood
10 the complete scope of the reliability from that
11 testimony, but I did hear what she said this
12 morning.

13 Q. So you have no reason to disagree with her
14 description how the location of this CT out at
15 Heskett at that time would have reduced the risk of
16 outages in the Bismarck-Mandan area?

17 A. I have no reason to agree or disagree
18 because the company hasn't done a study of the
19 reliability in that area.

20 Q. Are you telling me that the vice president
21 of electric supply of Montana-Dakota wouldn't
22 adequately be knowledgeable in terms of whether she
23 thought that would improve reliability for that
24 system?

25 A. I don't know Ms. Stomberg personally, but

1 I'm sure she's highly qualified and a very smart
2 person, but you're asking me to accept a fairly
3 complicated premise or conclusion based on her
4 three minutes of testimony on the subject here
5 today. So I can't, no. I mean, she might be
6 right, but in most proceedings that I'm familiar
7 with, companies -- applicants just don't make
8 statements like that, they have to support them
9 somehow, and that's all I'm suggesting.

10 Q. You don't believe her description this
11 morning was supportive?

12 A. I thought it was a little too brief to
13 really know. I mean, to me it was interesting
14 information, but the details of the circumstance
15 weren't provided. I just don't know. As I said, I
16 have great respect for Ms. Stomberg and she could
17 be right.

18 Q. In doing our comparison of what might be
19 prudent resources between generation resources,
20 they might have different environmental attributes,
21 might they not, that might make you pick one
22 resource over another even though the other might
23 be cheaper?

24 A. You could in some circumstances attribute
25 a social cost of emissions. I don't believe that's

1 the practice here in North Dakota, but in other
2 jurisdictions, Mr. Kuntz, coal generation is
3 assigned an additional cost for emitting nitrous
4 oxide, sulfur dioxide and carbon dioxide. So it is
5 possible, sir.

6 Q. But that would be a situation again where
7 you might have least-cost resources that are
8 prudent, but then when you consider the
9 environmental attributes of another resource, you
10 might determine that one is also prudent?

11 A. Well, but the cost of those -- if the cost
12 of those environmental attributes are included,
13 then they'll be reflected in whether one is least
14 cost or not.

15 Q. Assuming that they've got quantifiable
16 costs?

17 A. Sure. Sure.

18 Q. Let me talk briefly about the North Dakota
19 wind project, and I think we can move off of that
20 fairly quickly.

21 You would agree with me that even if the
22 company or the Commission agreed with your analysis
23 that the 150 megawatt North Dakota wind project
24 were built, that would not remove the company's
25 need for additional capacity in 2015, would it?

1 A. I sincerely doubt it. Well, if I believe
2 -- scratch that. I believe Mr. Neigum testified
3 here today that that was an energy-only resource.
4 If that's true, then there would be no capacity
5 value from that plant. On the other hand, wind
6 projects do provide capacity, and let's just say
7 for the sake of argument that the resource was
8 assigned a 15 percent level of its nameplate, so of
9 150 megawatts, whatever 15 percent of 150 is, if
10 it's 22 and a half, that's how much capacity they
11 would get. Clearly that would not solve a capacity
12 need in 2015 of something close to 150, if that's
13 the answer you were looking for, sir.

14 Q. So this wind project would not necessarily
15 make the 88 megawatt CT project imprudent as an
16 alternative?

17 A. I offered no conclusion regarding that.
18 No. In fact, I said we can defer the debate over
19 the 150 megawatt wind project to a -- someday after
20 tomorrow.

21 Q. That's why I wanted to make clear that we
22 were clear, that you weren't suggesting that as a
23 reason to deny this particular application.

24 A. No, sir. I'm not using the availability
25 of the North Dakota wind as a basis for my

1 testimony. I'm using the availability of a
2 purchase from Illinois.

3 Q. In fact, are you aware that less than a
4 year ago the staff's consultant took the position
5 that it was imprudent for the company to have built
6 its existing 50 megawatts of wind generation?

7 A. I wasn't party to that case, sir, so I
8 don't know.

9 Q. Now let's talk about the Illinois
10 proposal, because I think that's really where this
11 case comes down to. You're aware the company did
12 not pursue the Illinois proposal because of its
13 concerns about the ability to use that capacity?

14 A. The company has stated that, yes. I'm
15 aware of that.

16 Q. And I believe even you stated in your
17 testimony that there is some risk that
18 Montana-Dakota might not be able to utilize the
19 capacity from the Illinois proposal in MDU's
20 capacity zone?

21 A. I believe that's a small to zero risk,
22 but, yes, it's theoretically possible.

23 Q. And if I understand correctly, under the
24 current MISO adequacy resource construct, if
25 approved, there would be an annual capacity auction

1 within the various MISO capacity zones. Is that
2 your understanding?

3 A. There would.

4 Q. And under the MISO proposal, MDU would not
5 receive PRCs -- planning resource credits, I
6 believe they are -- for its zone 1 demand from the
7 Illinois proposal?

8 A. I'm sorry. I must not have heard that
9 question right. Could you repeat that?

10 Q. Under the MISO proposal Montana-Dakota
11 would not necessarily receive PRCs for its zone 1
12 demand as a result of the power purchase agreement
13 from the Illinois proposal?

14 A. I don't agree with that.

15 Q. And how would -- so it's your position
16 that if it bought this Illinois proposal, it would
17 receive 176 or 88 megawatts, whatever size of PPA,
18 of zone 1 PRCs?

19 A. I believe that is a possible outcome under
20 the proposed regulatory resource adequacy plan
21 under MISO.

22 Q. And in order to receive those credits in
23 zone 1, isn't it true that the company would have
24 to secure a transmission service request?

25 A. I don't know that to be the case, sir.

1 Q. You don't know that to be the case?

2 A. No.

3 Q. You heard Mr. Neigum testify, I believe,
4 this morning that in order to reassure itself that
5 it could use those credits in zone 1, it would have
6 to secure a TSR?

7 A. I heard him say that, yes, sir.

8 Q. You don't know if that's correct or not?

9 A. I don't agree with that.

10 Q. Do you have something to cite from MISO's
11 proposal that would indicate the company would get
12 credit for those -- that capacity in zone 4 to meet
13 its zone 1 demands?

14 A. Right. I got that question. I don't know
15 as I sit here that I can cite you chapter and verse
16 of the MISO proposed tariff, but at a high level
17 it's my understanding that -- as I said earlier,
18 power flows from the west to the east in MISO, and
19 so delivering power from Illinois to North Dakota
20 runs counter to that, so, you know, to me there's
21 no deliverability issues with that.

22 Q. Are you aware that that general statement
23 that power flows west to east applies for base load
24 and renewable energy, not necessarily for peak?

25 A. I think in the MISO transmission expansion

1 plan, they refer to it -- they refer to Illinois as
2 an import-constrained zone at the time of the peak.

3 Q. Were you aware that North Dakota is a net
4 importer on peak?

5 A. I believe that -- well, no, actually I
6 don't know that because they show energy being
7 imported from MISO, but energy doesn't tell me when
8 it is.

9 Q. So if North Dakota were a net importer on
10 peak, which is when MISO determines your PRCs?

11 A. That part is correct, yes.

12 Q. If North Dakota were a net importer, can
13 you necessarily assume that you will be able to use
14 those capacity credits from that Illinois resource
15 to meet your zone 1 demand?

16 A. Well, again, I think it depends on the
17 deliverability of the system, and so to the extent
18 that a study was done to either show that at the
19 time of the peak there's no available capacity on
20 the MDU transmission system, that would be helpful
21 in answering that question, but I haven't seen that
22 analysis.

23 Q. And even if it was deliverable, do you
24 agree with Mr. Neigum that there would be a charge
25 for the use of that deliverability from zone 4 to

1 zone 1?

2 A. No, I do not.

3 Q. And do you have any source for that
4 disagreement?

5 A. Well, again, it's -- if you read the MISO
6 filing, there is a lot of discussion about
7 continuing the -- what's the word I'm looking
8 for -- the robustness of the bilateral market and
9 to be using -- to continue to be using existing
10 contracts. So I think if this had been signed in
11 2010, which would have been before the grandmother
12 date, then it's certainly possible that they would
13 not pay.

14 Q. You heard Mr. Neigum that use of that
15 grandmothers agreement would require that TSR be
16 in place, as well?

17 A. Again, I heard him say that.

18 Q. Mr. Hahn, I'm curious, I mean, it's pretty
19 clear from early on, both from your testimony and
20 the company's rebuttal, that the ability to use the
21 credits from this Illinois proposal were a key
22 issue in this case, would you agree, that you had
23 raised?

24 A. Absolutely.

25 Q. You're somewhat critical in saying, you

1 know, the company could have done this better, the
2 company could have done that better, the company
3 didn't show me this. I would have thought you
4 would come here with line and verse from the MISO
5 proposal to assure this Commission that if the
6 company had purchased or does purchase that
7 Illinois power purchase agreement, it was going to
8 get -- be able to use those credits fully in zone
9 1. Can you point to me, line and verse, anything
10 that you've provided from the MISO proposal to show
11 that the company will be able to use those credits
12 in zone 1?

13 A. As I said, Mr. Kuntz, I cannot do that as
14 I sit here.

15 Q. So do we have a situation where the
16 company could theoretically buy credits in Illinois
17 and not be able to use them in a service territory
18 in North Dakota?

19 A. As I indicated, I think that is a
20 theoretical possibility, but given my knowledge of
21 the MISO filing and the review that I undertook, I
22 don't know how -- it's certainly not a certainty.

23 Q. In that theoretical possibility is it your
24 position the company would be allowed to recover
25 the cost of that power purchase agreement even

1 though those credits weren't able to be used to
2 serve customers in North Dakota?

3 A. I didn't analyze the ratemaking treatment
4 for this unit, so I don't know the answer to that.

5 Q. And we could have a situation where the
6 company would be paying for credits in Illinois and
7 at the same time having to buy credits in the MISO
8 market in zone 1, not?

9 A. I'll grant you that's a theoretical
10 possibility, but, again, as I said earlier, it's my
11 belief that prices will be higher in Illinois
12 because of the import-constrained nature of that
13 area, so it might actually turn out to be a benefit
14 if the scenario that you hypothesize came to be
15 true.

16 Q. Let's take that scenario. I mean, one
17 scenario is somehow under the MISO construct the
18 company would be able to utilize those Illinois
19 credits fully in its zone 1 through a transmission
20 service request or maybe modification of the rules.
21 The other possibility, as I understand from your
22 testimony and talking to Mr. Neigum, is that you
23 buy capacity in zone 1, sell your capacity in zone
24 4, and hopefully the prices are about the same so
25 you've netted them out and customers in essence

1 indirectly have the benefit of that credit that you
2 sold in Illinois without having to pay for
3 transmission between the zones. Is that also a
4 possibility?

5 A. Again, I think that's a theoretical
6 possibility, yes.

7 Q. Is that what you're suggesting here rather
8 than if the company can't secure transmission
9 between zone 1 and zone 4? I thought from your
10 testimony that's kind of what you were suggesting,
11 use the Illinois credits as kind of a hedge against
12 what you're going to have to pay for credits in
13 zone 1.

14 A. Well, if it turns out that it's not
15 deliverable from Illinois to Dakota, then that
16 would still produce a beneficial outcome to
17 customers. I'm not sure that it isn't deliverable.
18 So -- and if it is deliverable, then they will get
19 the benefit in zone 1.

20 Q. And if it's not deliverable, then
21 hopefully these prices between zone 1 and zone 4
22 will work out?

23 A. Well, I don't think it's a hope. I think
24 the prices in zone 4 -- I believe it's zone 4 where
25 the Illinois unit is located, I believe they're

1 going to be higher than the prices in zone 1.

2 Q. In that scenario, in essence
3 Montana-Dakota would be an independent power
4 producer in zone 4, wouldn't they, for all
5 practical purposes? They're bidding in that
6 contract they've got into the market and hoping
7 that they can get more from the market than what
8 they're paying Tilton for?

9 A. I would not agree with the
10 characterization independent power producers. They
11 would be a vertically integrated utility with a
12 resource in a different capacity zone than some of
13 their load.

14 Q. They would be bid into a different
15 capacity zone?

16 A. Again, that is a possibility.

17 Q. Might we not accomplish the same thing by
18 doing a PPA with -- in Florida, a bid in Florida?

19 A. Well, no, because Florida is not a part of
20 MISO.

21 Q. Well, it doesn't have to be a part of MISO
22 if we've got a good contract in Florida with a PPA,
23 we could sell in the Florida market and offset the
24 cost of bidding it to North Dakota, couldn't we?

25 A. No, I don't agree with that.

1 Q. I asked Mr. Neigum this morning whether he
2 was -- or this afternoon if he was aware of MISO's
3 -- how MISO would treat a situation where, if there
4 was a capacity deficit in a particular zone, the
5 company had to pay penalties, but there was still a
6 deficit for its zone, how it would handle that
7 deficit in the event that capacity in that zone
8 wasn't sufficient to meet demand. Do you have an
9 understanding from the MISO filing of how that
10 would be handled?

11 A. Well, if you're talking about a physical
12 shortage --

13 Q. And I am.

14 A. -- and in an import-constrained area, I
15 mean, I believe the laws of physics say that if
16 your transmission lines won't import it and you
17 don't have it inside, then something has to happen,
18 either load has to be down, you've got to find some
19 other generation to turn on.

20 Q. And do you know from the MISO proposal how
21 they've proposed to meet that -- I mean, through
22 this auction it doesn't create generation in
23 itself, so how do you meet a deficit situation
24 through this auction proposal?

25 A. In any power system, whether you have a

1 capacity market or not or whether you have
2 vertically integrated utilities being responsible
3 for their own capacity, there is always a
4 possibility of an outage of enough pieces of
5 equipment that you will not be able to serve load.
6 I don't believe that's unique to a capacity
7 market -- to a system that has a formal capacity
8 market. And so that's why it's important to do the
9 kind of reliability assessments that I referenced
10 earlier. That's why NERC, National Electric
11 Reliability Corporation, requires transmission
12 owners to do a one- and a five- and a ten-year
13 evaluation of their system to try and make sure to
14 the extent -- maximum extent possible that doesn't
15 happen.

16 Q. So you're not citing me to anything, so I
17 take it you're not aware of anything specifically
18 in the MISO proposal for their auction of how they
19 would address an overall shortage in planning
20 credits?

21 A. No, it wouldn't be there, because the MISO
22 capacity construct, if you will, is an attempt to
23 encourage capacity where it's needed. That's why
24 in an import-constrained area you have higher
25 prices, and the higher prices are intended to

1 encourage the construction of new capacity.

2 The reliability problems that you're
3 referring to are ones that operate as face once the
4 system is built. So however you built that system,
5 whether you built it through a formal capacity
6 market or whether you had individual utilities, you
7 know, operating as islands and doing their own
8 thing, you always have a concern about an incident
9 or a series of incidents that could cause you to be
10 unable to serve load.

11 So I would not expect the MISO capacity
12 market to address a physical shortage, if you will.
13 That's an operating issue whereas the MISO
14 reliability construct is a planning issue.

15 Q. And this is an annual auction; correct?

16 A. That's my understanding, yes.

17 Q. So if in the end of 2013 the company bids
18 into its 2014 needs and it's not able to acquire
19 sufficient capacity credits through that auction,
20 what's going to happen?

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

22 Q. Well, let's assume that in 2014 -- let's
23 go 2015, that's when the company's current contract
24 expires, it's got a need for 150 planning credits,
25 it bids into the auction and there aren't enough

1 credits in the auction to satisfy everybody who is
2 short, the company can only get 130 credits out of
3 that auction, what happens?

4 A. They import 20.

5 Q. Well, assuming it's import-constrained.

6 A. Okay. Then if -- you've built a system
7 and now you're trying to operate it and if as a
8 result -- I mean, first of all, your question does
9 not address the issue of whether this is a
10 situation with all facilities in service or with
11 one or two facilities out, which is the normal
12 planning -- reliability planning standard, but,
13 again, it's a physical operating problem. I mean,
14 if you don't have the ability -- if you are in an
15 import-constrained area and the in-zone generation
16 plus the import capability is not greater than the
17 load, then you have to do something.

18 Q. And would you agree with Mr. Neigum's
19 testimony that under the MISO proposal, to the
20 extent the company didn't acquire sufficient
21 planning credits, it would be subject to penalties
22 based upon the CONE or some multiple of the CONE?

23 A. There is such a penalty provision in the
24 MISO construct as it's been filed.

25 Q. And would it be your position that if the

1 company were not able to use the Illinois credits
2 to meet its zone 1 requirements and weren't able to
3 acquire sufficient credits in the zone 1 auction,
4 that it incurred penalties, that those penalties
5 would then be recoverable from customers?

6 A. I, again, didn't address the issue of
7 recoverability. I did a cost comparison, but I did
8 not make any specific analysis or assumptions about
9 cost recovery for any of this.

10 Q. Shouldn't the costs of these risks somehow
11 have been included in your analysis in some manner?
12 I mean, if there was a transmission cost to get
13 those credits from zone 4 to zone 1 or there was a
14 risk that you might not be able to fully recover
15 those, whether it's 5 or 10 percent, shouldn't you
16 somehow have attempted to quantify that in the same
17 way that you say the company should have attempted
18 to quantify the reliability value of locating that
19 generator in North Dakota?

20 A. In an ideal world it would have been nice
21 to do the reliability analysis that I referenced.
22 That was not the scope of my assignment. I don't
23 have all the resources available to me that the
24 company has. In my experience, other transmission
25 owners do these studies on a routine basis.

1 So my only point is that this issue was --
2 didn't appear to be mentioned anywhere in either
3 the company's IRP or in the case. In fact, the
4 company has a 10-year transmission planning
5 document that, quite frankly, seems to imply that
6 everything is fine. So I was a little bit
7 surprised to find out that there's now the
8 possibility at least of some of these additional
9 costs. And the point I'm trying to make is that if
10 this were -- if these issues were as prominent as
11 they now appear to be, it seems to me that they
12 should have been analyzed in the RFP and the IRP.

13 Q. I think we're talking two separate things.
14 I'm talking the risk of not being able to use the
15 Illinois credits, that there should be some
16 quantification of that risk applied to your cost
17 comparison between the on-system owned unit versus
18 the zone 4 proposal.

19 A. Well, you could. I mean, to the extent
20 that the amount to be paid had a probability
21 associated with it, you could quantify it, sure.

22 Q. And you didn't attempt to do that?

23 A. No, sir.

24 Q. With respect to the reliability, you can
25 have two units, the location of which may be both

1 located in North Dakota, one close to a load
2 center, one not close to a load center, one might
3 incrementally improve your reliability, the other
4 doesn't do anything for reliability, I mean, that's
5 a consideration? It may not have a significant
6 cost benefit associated with it, but it's a
7 consideration that you as a system planner would
8 consider, would you not?

9 A. I would love the opportunity to consider
10 that.

11 Q. You also recognize, I believe, in your
12 testimony that the company's ability to utilize the
13 Illinois capacity could be affected if MDU were no
14 longer a member of MISO?

15 A. Can you point me to a cite for that?

16 Q. Well, let me ask you this question: Do
17 you believe the company's ability to utilize the
18 Illinois capacity could be affected if MDU were no
19 longer a member of MISO?

20 A. Not necessarily. When a member decides to
21 leave an RTO like MISO, and in MISO's case there's
22 a five-year notice, I believe there's an exit fee,
23 but I'm not a hundred percent sure of that, but
24 what generally happens is that if they want to
25 leave, they're not allowed to, quote/unquote,

1 strand transmission customers.

2 And I think a good example of this is
3 another project that I've been involved in, is
4 Entergy Arkansas wanted to join MISO. They are
5 connected through a single 345 kV transmission line
6 that goes through Ameren, and the other alternative
7 was that they join SPP, Southwest Power Pool, which
8 Entergy has dozens of connections, and so during
9 the proceeding the folks from MISO were asked to
10 describe, you know, what would happen if Ameren
11 left. And what the folks from MISO said was, well,
12 you know, there is this exit fee, there is a
13 five-year notice period and that it's FERC's policy
14 not to allow transmission -- other transmission
15 customers to be harmed by that decision. They
16 actually used the word hold harmless.

17 So, you know, obviously if MDU left, but
18 there was still other transmission ties, maybe they
19 wouldn't have to be concerned about that. But I
20 don't think that FERC will allow a system, an RTO,
21 that was built on an integrated system to allow a
22 key member in the middle of it to exit and leave
23 another transmission customer stranded. I don't
24 think that's likely.

25 Q. Are you aware that both MDU and Otter Tail

1 over the last three years have given notice of
2 possible consideration to exit MISO?

3 A. I was informed that a couple years ago
4 Otter Tail made such a statement.

5 Q. Are you aware that MDU has also made such
6 a notice?

7 A. I don't recall that, but certainly a
8 possibility.

9 Q. And you're aware, I assume, through the
10 testimony today of the numerous interconnections
11 that Montana-Dakota has with the IS system, WAPA?

12 A. Through the WAPA system, yes, they
13 described on a map that Mr. Neigum showed.

14 Q. So because of considerations which might
15 be happening at MISO, at some point maybe it would
16 make sense for Montana-Dakota to join the ISO and
17 leave MISO. In that event, are you suggesting
18 there would not be a charge for its ability to use
19 those Illinois credits?

20 A. I'm sorry. What ISO are they joining?

21 Q. The WAPA ISO with Basin and WAPA.

22 A. You know, I'm not familiar with that, but
23 I think your question is, would they still be able
24 to use the combustion turbine in Illinois if they
25 left MISO and joined an RTO or an ISO that involved

1 WAPA and Basin Electric. Is that the question?

2 Q. Or any other ISO.

3 A. Or any other ISO. Well, I'm not sure what
4 other alternative there would be, but, again, I
5 don't know the answer to that. It's possible that
6 they might need to treat this resource as an
7 external -- when I say "this resource," the
8 resource in Illinois as an external resource.
9 Without knowing what -- that transmission tariff of
10 the merged companies, I couldn't say for sure what
11 that would be. I'm not aware that the company has
12 any serious plans, nor have they filed notice, to
13 withdraw from MISO, so I don't know. Lots of
14 possibilities.

15 Q. And, you know, a lot of the possibilities
16 we've discussed this afternoon, Mr. Hahn, revolve
17 around this MISO resource adequacy construct as
18 proposed?

19 A. Well, we've certainly talked about that.
20 I don't know -- I'm not sure I can link that to the
21 possibility of them -- of people leaving MISO,
22 but --

23 Q. Not leaving MISO necessarily, but the
24 ability to use -- how you might use credits in
25 Illinois to serve load in North Dakota, the annual

1 auction, all of those are kind of tied to this MISO
2 construct proposal?

3 A. Well, if you're not in MISO, you're not
4 going to participate in the MISO capacity market.

5 Q. No. But, I mean, the auction process and
6 how we might be utilizing the different zone 1 and
7 zone 4, those are all things that are part of this
8 MISO proposal, the annual capacity auction, the
9 zones, these load serving zones, those are all part
10 of that MISO proposal, are they not?

11 A. Oh, the various capacity zones are part of
12 the resource adequacy construct, yes, sir.

13 Q. And that construct hasn't even been
14 approved yet, has it?

15 A. No, sir, it hasn't.

16 Q. And there's been a number of critical
17 comments filed to that proposal, haven't there?

18 A. There most certainly have.

19 Q. And including comments by the Organization
20 of MISO States?

21 A. They've been a heard -- a heard party in
22 this case, yes.

23 Q. Which this Commission is a member of?

24 A. Yes, they are.

25 Q. So we don't even know how that construct,

1 if and when it's approved, what it's going to look
2 like, do we?

3 A. Well, obviously you don't have final
4 approval yet, but, on the other hand, the current
5 filing was done -- I mean, this isn't the first
6 time this issue has arisen. I mean, it's been
7 filed before and FERC's ordered them to do things,
8 so, I mean, I suppose the entire concept could be
9 scrapped and they start over again, but that seems
10 unlikely.

11 Q. But doesn't it seem somewhat risky to you
12 that the company would file -- or sign an 88
13 megawatt PPA based upon a utilization in the
14 construct that hasn't been approved or that, if
15 it's approved, could then be changed in three to
16 five years from now in terms of its ability to use
17 those resources?

18 A. Well, I think no matter what gets finally
19 approved, it can always change in the future. I
20 mean, you went from a system of what we have today
21 to what you're going to have in two years. So
22 there's always a risk. On the other hand, you
23 know, you look at the -- you have to look at the
24 benefits side, as well. I mean, how much money
25 would you save if you were able to use this? And

1 that's really all the point I'm trying to make.

2 Q. Your Exhibits 7 and 9, you included
3 carrying cost based upon MDU's embedded cost of
4 debt; is that correct?

5 A. Well, I used the interest rate that the
6 company used. I don't believe it was advertised or
7 described as embedded cost prior to the revised --
8 the revised exhibit of Mr. Neigum.

9 Q. You don't recall what that cost of debt
10 was?

11 A. It was 7 percent.

12 Q. And then you filed your revised Exhibits 7
13 and 9 after he filed his corrected testimony
14 pointing out that the current cost of debt would be
15 between 4 and 4 and a half percent; correct?

16 A. That's what his testimony is, yes, sir.

17 Q. You didn't bother to correct the carrying
18 cost for your exhibit, though?

19 A. No, sir.

20 Q. Would you agree that 4, 4 and a half
21 percent is more representative of the cost of
22 financing this project?

23 A. I have not looked at what -- the company's
24 cost of debt. I assume the company knew its cost
25 of debt when it put the filing in so I stuck with

1 it.

2 Q. Are you familiar with the --

3 A. Just if I could, I continued to rely on
4 the 7 percent.

5 Q. Notwithstanding Mr. Neigum's subsequent
6 testimony saying the cost of financing this project
7 is closer to 4 to 4 and a half?

8 A. That's right. I continued to use 7
9 percent.

10 Q. You also showed in your Exhibit 9 that
11 there was a cost advantage to the Illinois proposal
12 based upon congestion benefits assuming higher
13 energy prices in zone 4; is that correct?

14 A. That's correct.

15 Q. And that's based upon one year of
16 historical data; is that not correct?

17 A. Exhibit RSH-8 shows a -- the most recent
18 12 months, and, in particular, if you look at the
19 on-peak -- this is a graph of on-peak LMPs, so that
20 was the basis of the assumed \$10 per megawatt-hour
21 price difference between Illinois and the Heskett
22 zone, which is the Montana-Dakota price that we
23 looked at.

24 Q. Your exhibit then takes -- based upon one
25 year of historical data, then projects that forward

1 for the next 20 --

2 A. Yes.

3 Q. -- the same price difference?

4 A. Yes. Well, now, we didn't escalate that
5 price difference, either. I mean, I held it flat
6 at \$10 a megawatt-hour, I mean, while other fuel
7 costs are escalating. So there's sort of a degree
8 of conservatism, if you will, in that we have not
9 escalated those congestions costs. As LMPs would
10 be expected to rise, you might expect that
11 difference to rise, but I didn't include that.

12 Q. Well, you testified that you thought some
13 of these MBP projects would improve congestion
14 between the zones to make -- improve the ability of
15 the company to utilize that Illinois capacity, did
16 you not?

17 A. Absolutely. And I believe that those
18 projects will reduce congestion, which is why I've
19 held that figure flat, I did not allow it to grow.

20 Q. Well, actually, shouldn't you reduce that
21 gap over time?

22 A. I suppose that's possible. I will note
23 that that's a \$3.9 million net present value out of
24 59, so I'm not sure if it were declining, that it
25 would change the final conclusion very much. But I

1 will grant you, Mr. Kuntz, that it is possible that
2 congestion could decline.

3 Q. And I was somewhat unclear regarding the
4 WAPA transmission charge that Mr. Neigum described.
5 You're not saying you don't believe that
6 transmission charge can be avoided with the 88
7 megawatt combustion turbine at Heskett, you're just
8 uncertain; is that correct?

9 A. You said you were confused, and I'll admit
10 that I'm confused, because, again, in a call we had
11 with the company, that was attributable to what I
12 refer to as loop flow, and now I find here today
13 that it's attributable to an offset for network
14 service, which make me equally confused because
15 network service is paid for by load, it's not
16 dependent on how much generation you have. So I'm
17 not sure what the company really meant by that.

18 Q. In that call that you had with staff, did
19 Mr. Neigum in describing the WAPA charge anywhere
20 refer to that charge being attributable to loop
21 flow, or was that just your assumption from the
22 fact that there was a WAPA charge?

23 A. I think the word "loop flow" came up in
24 the call, but if Mr. Neigum didn't say it, then you
25 can attribute that interpretation to me.

1 Q. And did you ask for any additional
2 information from the time Mr. Neigum filed his
3 rebuttal testimony until today requesting further
4 information regarding this WAPA charge?

5 A. No, sir.

6 Q. Would you agree with me, Mr. Hahn, that
7 really that's a pretty critical piece to evaluating
8 -- in addition to whether we're going to be able to
9 use these Illinois credits in terms of a cost
10 comparison, that the WAPA charge is a pretty
11 critical piece in your analysis, whether or not it
12 exists or doesn't exist?

13 A. Well, it's a critical piece in Mr.
14 Neigum's analysis, too. And as I said in my
15 opening remarks, it's a big number and so you
16 clearly need to get to the bottom of it.

17 Q. And you're aware, I believe you referenced
18 the fact, that the North Dakota ADP statute
19 requires the Commission to consider the benefits of
20 having a generation facility located in this state
21 when reviewing an ADP application; correct?

22 A. It's my understanding that in-state
23 resources are afforded a presumption of prudence.

24 Q. And also requires specifically the
25 Commission to consider the benefits of locating the

1 resource in North Dakota?

2 A. This is the ADP statute?

3 Q. That's correct.

4 A. Shoot, I don't have a copy of that with
5 me. I'll accept that that language is there. I
6 don't have a copy with me to verify it.

7 Q. Did you give any consideration to compare
8 the benefits of having the resource located in
9 North Dakota?

10 A. Well, to the extent that in the carrying
11 charges there were property taxes included, that
12 would be a benefit, so we have included that.

13 Q. As a deduct?

14 A. No.

15 Q. Well, you're supposed to consider the
16 benefits, so to the extent property taxes are paid
17 in North Dakota, isn't that a benefit of locating a
18 project in North Dakota versus Illinois?

19 A. Could be. Yes, you're right. You're
20 right.

21 Q. And what about income taxes that would be
22 paid to any of the states that Montana-Dakota
23 serves?

24 A. Well, again --

25 Q. State income tax.

1 requesting is whether advocacy staff would be able
2 to produce a similar list to what we requested of
3 MDU, which would be your understanding of the non-
4 or unquantified factors that MDU used in supporting
5 its request for ADP. We had asked for the same
6 thing from MDU, but we wanted to know if advocacy
7 staff had the same list of what were the
8 unquantified considerations or factors. You
9 wouldn't have to do it from the witness stand, but
10 whether --

11 A. That would be very nice of you.

12 Q. -- you could produce it as a late-filed
13 exhibit.

14 A. That's something I think I'd need to talk
15 to Mr. Gruman about. Quite frankly, that's not a
16 question that I did anticipate. So the question
17 would be for us -- me to list the nonquantifiable
18 factors?

19 Q. Well, considerations or factors, yes,
20 because we've had a lot of testimony of all the
21 factors that go into the decision, some of which
22 are quantified, for example, in the IRP, and then
23 there are some that cannot be quantified, and we're
24 trying to find out if the parties have the same
25 list or have a different idea of what those are.

1 A. Well, if you put that as a request to me,
2 I will do the best job I can answering it with Mr.
3 Gruman's assistance. I don't think I could do it
4 today, though.

5 Q. I understand that.

6 A. Okay. I want to be clear about that.

7 Q. And it would be the same name as the
8 previous late -- or MDU exhibit, but it would have
9 advocacy staff's.

10 JUDGE WAHL: Let me understand what the
11 title of this is. It's a nonquantifiable list of
12 nonquantifiable factors or considerations what, for
13 the --

14 MS. JEFFCOAT-SACCO: That MDU used to
15 support or to rely -- for its application for ADP.

16 THE WITNESS: So you want me to come up
17 with a list of factors that --

18 MS. JEFFCOAT-SACCO: That you understand
19 that they used, yes.

20 THE WITNESS: Ah. Okay. That's -- thank
21 you for that.

22 MS. JEFFCOAT-SACCO: Which I'm, I guess --
23 I'm sorry if it's so confusing, but I'm guessing
24 that your analysis of their application you had to
25 say this is quantified, this isn't. I don't know.

1 But if you have -- if you have such a list or if
2 you can produce such a list, would you be willing
3 to submit it?

4 THE WITNESS: Like I said, I will give it
5 my -- the good, old college try.

6 MS. JEFFCOAT-SACCO: Thank you.

7 JUDGE WAHL: Well, Mr. Gruman, is there --
8 I'm asking for an objection.

9 MR. GRUMAN: I'm not going to agree to
10 anything right now, but we'll talk about it and
11 then we'll get back. I mean, I think that's the
12 best we can do at this point. There's a request
13 that's made, but we need to get our head wrapped
14 around exactly what's being requested, so that's
15 about the only answer that I have at this moment.
16 If that's an objection, I guess it's an objection.

17 COMMISSIONER KALK: Sounds like it.

18 JUDGE WAHL: Let me think about this. Mr.
19 Kuntz.

20 MR. KUNTZ: It doesn't come to me. I
21 mean, I think if it's a request for factors that we
22 considered in our decisionmaking process, which I
23 think is what we were asked to do, nonquantifiable
24 factors, I think we'll try to develop that list.

25 MS. JEFFCOAT-SACCO: Theirs is already

1 agreed to.

2 MR. KUNTZ: Personally, I think it's a
3 little bit unfair to ask Mr. Hahn to come up with a
4 list based upon his understanding.

5 JUDGE WAHL: No, don't misunderstand me.
6 I'm asking for an objection. You've got an exhibit
7 which is going to go into evidence. Do you have an
8 objection to doing this?

9 MR. KUNTZ: It's his understanding of what
10 we considered, I guess. I --

11 JUDGE WAHL: Well, yes or no.

12 MR. KUNTZ: No.

13 JUDGE WAHL: All right. That's what I'm
14 looking for. So, Mr. Gruman, back to you. This is
15 not something -- you're supposed to think about
16 this now.

17 MR. GRUMAN: I can't give you a definitive
18 yes, so, therefore, by logic I have to say no. I
19 mean, I think that's pretty much what's been
20 expressed.

21 JUDGE WAHL: That is, you have no
22 objection?

23 MR. GRUMAN: No. I mean, that I do have
24 an objection.

25 JUDGE WAHL: Well, that's not going to

1 work, Mr. Gruman. You have a choice, I object or I
2 do not object.

3 MR. GRUMAN: I object because we're not
4 even sure exactly what's being asked of us.

5 JUDGE WAHL: I agree. Or what you're
6 going to put together or what it's going to look
7 like at this point.

8 MR. GRUMAN: Exactly.

9 JUDGE WAHL: It's a little bit different
10 from what I -- you know, this business about -- let
11 me just editorialize a little bit on my way out the
12 door. These late-filed exhibits, they continue to
13 grow and expand way beyond I think what they
14 started out years ago when I first started this.
15 And what we're doing is we're putting -- we're
16 putting evidence into the record that nobody has
17 seen, nobody has had a chance to evaluate it, and I
18 think that's a problem. Now, Mr. Gruman has a
19 point. He's looking at me, he says, what am I
20 supposed to object to, I haven't seen anything, I
21 don't even know if we can reasonably do this.

22 So --

23 MS. JEFFCOAT-SACCO: May I respond?

24 JUDGE WAHL: I'm inclined to sustain the
25 objection, but go ahead.

1 MS. JEFFCOAT-SACCO: Well, all that we are
2 trying to do --

3 JUDGE WAHL: I understand.

4 MS. JEFFCOAT-SACCO: -- was, we have had
5 testimony initially from the applicant that there
6 are certain considerations that are not -- that
7 cannot be quantified that are a basis for why they
8 are asking for something, and they have agreed to
9 provide that, which they've testified to. We're
10 saying -- all we're saying is, don't make us search
11 for them, please, at least put them down in one
12 place for us, so that's applicants.

13 All we were trying to get to then is
14 whether or not advocacy staff even knew that the
15 case had those considerations in it. Now, the
16 second question might be, okay, what do you think
17 about those considerations? But we're not that far
18 here in order to ask that. That's all we were
19 trying to ask from advocacy staff. So, you know,
20 if you sustain the objection, I understand that.
21 The MDU question -- that one has been admitted, so
22 I don't know that there's any --

23 JUDGE WAHL: No, I'm not saying that. MDU
24 agreed to do that.

25 MS. JEFFCOAT-SACCO: Right.

1 JUDGE WAHL: It's no concern of mine if --
2 generally speaking, if there's no objection, that's
3 not my business to say there should be an
4 objection.

5 MS. JEFFCOAT-SACCO: I understand. We
6 were -- we were just asking for the staff's
7 analysis of that same list, to see if it was the
8 same or different.

9 JUDGE WAHL: Just out of curiosity, what
10 are you going to do, Mr. Hahn? Are you going to
11 review the record and see what the testimony was
12 about these nonquantifiable factors, or how are you
13 going to come up with this list?

14 THE WITNESS: With the clarification that
15 I'm -- I thought the original question was to ask
16 me what I thought the unquantifiable factors were.

17 JUDGE WAHL: That's what I thought it was,
18 too.

19 THE WITNESS: The question that I now
20 understand I'm being asked is for me to say what
21 the company did.

22 JUDGE WAHL: Right.

23 THE WITNESS: And what I would do is go
24 through the company's filing and look and say, oh,
25 here's a factor they mentioned, they haven't --

1 either haven't quantified it or they've said it
2 can't be quantified. I think, you know, that's
3 really the only way I could try to address that
4 question.

5 MS. JEFFCOAT-SACCO: Some of that is in
6 the testimony already. You testified that
7 reliability was one such --

8 THE WITNESS: Sure. And so --

9 MS. JEFFCOAT-SACCO: -- factor
10 unquantified. That's the kind -- I mean, and I'm
11 not asking him to put words in the company's mouth
12 or read their mind. I'm just asking his analysis
13 of the company's justification it's not quantified.
14 That's what we're asking for.

15 JUDGE WAHL: Mr. Gruman, do you want to
16 reconsider your objection?

17 MR. GRUMAN: No, Your Honor.

18 JUDGE WAHL: The objection is --

19 MR. GRUMAN: Respectfully.

20 MS. JEFFCOAT-SACCO: I can withdraw. I
21 can withdraw, too.

22 JUDGE WAHL: The objection is sustained.

23 MS. JEFFCOAT-SACCO: Okay.

24 JUDGE WAHL: Anything further, Ms.

25 Jeffcoat-Sacco?

1 MS. JEFFCOAT-SACCO: No, I don't. I don't
2 have anything.

3 JUDGE WAHL: Questions from the
4 Commission. Commissioner Clark.

5 **EXAMINATION**

6 **BY COMMISSIONER CLARK:**

7 Q. I just have one and it's related to the
8 impact of potential retirements of the coal fleet
9 in the MISO region, that MDU has submitted
10 testimony in MDU 111, DJN-1, which is the EPA
11 impact analysis from the MISO, and discusses the
12 fairly dramatic impact that MISO projects for
13 itself and probably more so than other RTOs around
14 the country of potentially up to 13 gigawatts of
15 potential retirements. In fact, they indicate they
16 expect it will be towards that higher value of 13
17 gigawatts given some other things. To what degree
18 is that taken into your consideration of -- well,
19 how is it taken into consideration in your
20 testimony or has it impacted it at all?

21 A. I mean, I did not specifically -- I mean,
22 I didn't analyze deliverability at all and, to the
23 best of my knowledge, neither did the company, so
24 even under the existing system, deliverability
25 analysis hasn't been done. So if the question is

1 the company is in business to serve their
2 shareholders, and they have a -- I mean, I've been
3 in their shoes, so they have a dual responsibility
4 to their customers to keep rates as low as possible
5 and keep service as good as possible, and they have
6 an obligation to their shareholders who have, you
7 know, invested money in the company. But, I mean,
8 there is a tendency if you're an investor-owned
9 utility to favor your own build projects, quite
10 frankly, because they do increase rate base, and
11 rate base is what you make your earnings on.

12 I'm not saying that you should necessarily
13 impute a penalty, but -- and, by the way, if it
14 were close, you know, maybe then the investment on
15 behalf of the company would be the way to go. I
16 was here a month, two months ago in a different
17 proceeding and the conclusion was, yes, there is a
18 lower cost alternative, but, you know, quite
19 frankly, I'm not sure it's better than what the
20 company has proposed and the costs were close, so I
21 recommended going with the investment option in the
22 Big Stone AQCS.

23 Now, on the other hand, if you have a
24 situation where there's a big difference, then I
25 think you have to, you know, think about that.

1 So, you know, I think the line of
2 questioning was intended to point out that there is
3 a benefit to the company in picking its own
4 resources, but I don't know that there's
5 necessarily a dollar penalty to be associated with
6 that.

7 Q. Just one other sort of analytical
8 question. Do you think -- do you think we're
9 being -- that the stage is being set for a --
10 whether it's a combined cycle or a second CT or
11 something bigger than this single 88 megawatt --
12 highly dispatchable, but 88 megawatt turbine in
13 Mandan, is that stage being set? Is that obvious?
14 Am I right to be, you know, suspicious of that?
15 Because, quite honestly, if that is the case and if
16 a couple of years from -- you know, after this is
17 built, obviously the next one becomes a little
18 harder for advocates who might have a concern to
19 oppose. So am I right to be somewhat concerned?

20 A. Well, it certainly appears to me that the
21 stage is being set to take this 88 megawatt
22 combustion turbine and convert it to combined cycle
23 operation, either through the installation of a
24 heat recovery steam generator and a new steam
25 turbine or a heat recovery steam generator and the

1 two existing steam turbines that are Heskett. It
2 does appear to me that that's the case. And yet
3 that option was never picked in the resource plan.

4 So I am a little bit confused by that, and
5 it will be interesting, I think, to see, if the
6 company does go out for an RFP in 2012, what its
7 proposed project is, because if it turns out to be
8 combined cycle operation, then one would have to
9 look back at this proceeding and say, where was
10 that?

11 So, I mean, I think it certainly looks to
12 me like the stage has been set. I can't testify to
13 motive. I don't know what the company's plans are,
14 but that would certainly be -- look like an option
15 that's being set up.

16 COMMISSIONER CRAMER: Nothing else. Thank
17 you.

18 JUDGE WAHL: Further questions from the
19 Commission. Commissioner Kalk.

20 COMMISSIONER KALK: Thank you, Your Honor.

21 **EXAMINATION**

22 **BY MR. KALK:**

23 Q. Thank you for your testimony, Mr. Hahn.

24 A. You're welcome, sir.

25 Q. The proposals that you looked at, can you

1 give me some more background on the one that was,
2 for lack of a better term, rejected about the wind
3 and nuclear resource? How did you go through and
4 you got -- I'm sure you looked at all these
5 proposals in the RFP.

6 A. It was just a wind project. It was a
7 North Dakota wind project.

8 Q. There's one that's in Mr. Neigum's
9 PowerPoint that says a wind and/or nuclear
10 resource. Was that maybe -- was that not correct?

11 A. I didn't look at a nuclear resource.

12 Q. Okay. I guess I was just trying to go
13 through a little -- as you went through them, what
14 was, I guess, the next best one if you take out the
15 Illinois project?

16 A. Well, it appears that the -- what's
17 referred to as the North Dakota wind project. I
18 won't name it because that's confidential, but it
19 was a 150 megawatt proposal, and --

20 Q. Okay. And that's the one we talked about?

21 A. And the company rejected that because MISO
22 had issued a cost estimate of -- and I think the
23 number is \$191 million or \$190 million that you
24 would have to add in terms of transmission upgrades
25 to interconnect that project with the grid. And

1 then there was a subsequent analysis to drop that
2 to 25. And so with that drop in, quote/unquote,
3 transmission cost, that alternative produced a fair
4 amount of benefits in the EGEAS run.

5 Q. So how far down the list would you have to
6 go to put this project that the company is
7 proposing right now?

8 A. I'm sorry, I don't have that list. Could
9 I borrow Mr. Gruman's exhibit book?

10 MR. GRUMAN: If I may approach.

11 JUDGE WAHL: You may.

12 MR. GRUMAN: Thank you.

13 Q. (COMMISSIONER KALK CONTINUING) Because
14 there was numerous alternatives the request for
15 proposal came back with.

16 A. Yes.

17 Q. I'm just curious, how far down the list
18 you would put this project that the company is
19 putting forward today, if you have anything on
20 that. I would guess you weighted them all to some
21 degree.

22 A. Well, we did, but, again, what we were
23 looking at -- and, as I said earlier, we'll defer a
24 debate on the wind project.

25 Q. So you were looking for the best one, in

1 your opinion, not trying to rank them, if you will?

2 A. Right. Right. And the funny thing about
3 the Illinois proposal is that if you just -- there
4 was a form they filled out and it had prices, and
5 if you looked at those prices, you would know --
6 you would know that that project would be cheaper
7 than a new build. And so, you know, it immediately
8 drew our attention and said, huh, we should look at
9 this, and now you've seen what's happened and all
10 the issues that have come up since then. The
11 reason why we picked that is that it was really so
12 attractive just on the terms that it was offered up
13 that you had to look at it.

14 Q. Probably a plant out there that has lost
15 its markets because there's no longer the demand
16 out there, something like that. But I guess what
17 I'm trying to get a feel for, though, is you said
18 something that I talked to Mr. Neigum about about
19 the request for proposal -- I can't remember your
20 exact words, but you said it basically wasn't done
21 very well. That's what I heard you say, or it
22 could have been done better.

23 A. Well, I think the concern I have is that
24 you had a project that was extremely attractive
25 pricewise and yet it wasn't selected.

1 Q. But that didn't -- did that have to do
2 with the proposal, itself, or their interpretation
3 of the projects as they came back?

4 A. It had to do with the RFP process. I
5 mean, let's face it, if the Commission were to set
6 a policy -- and I'm not saying they have and I'm
7 not saying they should, but if you want to have a
8 policy to have only in-state resources, then at
9 your next RFP tell those folks from Illinois they
10 need not apply. I think that you have -- you
11 should look at other resources because when I was
12 here before, there was great pride taken in the
13 fact that North Dakota has the lowest electric
14 rates in the country. And I think as long as you
15 continue to keep least cost in your least-cost
16 feasible resource in your sort of mindset, there's
17 a good chance that that position will continue.

18 Q. So in your experience and what you do, if
19 a proposal was written that said that generation
20 must be in zone 1 of MISO, would that be a
21 legitimate point in a request for proposal? Would
22 that be something that you think would not be
23 appropriate?

24 A. Well, you could do that and yet that will
25 limit the bids you'll get. So you have to decide,

1 you know -- and maybe the company makes this
2 decision when they submit -- or I don't even know
3 if they do submit their next RFP and the Commission
4 approves it, but you have to decide, gee, if I'm
5 only going to consider resources in zone 1 -- LRZ
6 zone 1, you have to ask yourself, what am I
7 excluding? Is there a project out there that would
8 produce greater benefits?

9 So -- and, again, I will tell you what
10 other jurisdictions have done. They've gone for a
11 broad approach and then they've done a
12 deliverability analysis, and that, you know, at
13 least you have some analytical basis on which to
14 say, gee, that's a really good bid, but you know
15 what, if you add all these other costs, it doesn't
16 make the cut.

17 Q. So based on your experience in these kind
18 of things, because one of the things I'll use an
19 example of, we do land reclamation here, too, we've
20 gotten some bids from well outside the region that
21 are very low. When it comes time to do the
22 project, they fall apart. So how much work do you
23 do in your analysis where they've actually said
24 they can deliver from Illinois, actually can be
25 delivered, and it's not just something on a piece

1 of paper that when the company goes through and
2 does all the things, it doesn't work? How do we --
3 how do we broker that?

4 A. Well, again, I think you do a
5 deliverability analysis.

6 Q. So when would that be done? After they've
7 already decided they're going to do it?

8 A. No, you should do it as part of the RFP --
9 the RFP, yes, absolutely.

10 Q. Okay. Because I guess I'm just trying to
11 step back from a viewpoint of we have all this
12 energy in the state and I've heard all the
13 testimony, but it's hard to fathom that all the
14 variables of moving electricity from all the way
15 across there to all the way here have been
16 considered in this.

17 A. Well, I guess I'm not sure that they have,
18 and I think they should be. And so, you know --

19 Q. Okay. But yet you're telling us that this
20 is the best deal, but you just said to me they
21 maybe haven't all been considered in their cost
22 estimate.

23 A. Well, based on the information that was
24 provided to us, it looked to us like this resource
25 was deliverable. Now, as I said --

1 Q. You just said you think -- so what do you
2 think has not been considered in this, because
3 that's big?

4 A. Absolutely. And so to the extent that
5 there is a deliverability analysis out there that
6 says, no, this can't be delivered -- my belief is
7 that when you do that, you will find it is
8 deliverable, because I believe that this -- the
9 wheeling from this project runs counterflow to the
10 normal flow of my discussion.

11 Q. Okay. So you think the deliverability
12 analysis is the biggest variable in what you'd
13 recommend at this point?

14 A. Yes.

15 COMMISSIONER KALK: Okay. I think that
16 was it. Thank you.

17 JUDGE WAHL: Further questions from the
18 Commission? Mr. Gruman, followup?

19 **REDIRECT EXAMINATION**

20 **BY MR. GRUMAN:**

21 Q. Mr. Hahn, is there anything further you
22 would like to provide to the Commission today that
23 you haven't been asked?

24 A. Well, I'd just like to thank the
25 Commission for the opportunity to, A, work on this

1 project and appear before you here today. You
2 know, our assignment was to review the company's
3 application and identify things that we agreed with
4 and identify issues that we think should be
5 addressed further. And I think we've done that.
6 That's the only judgment of how effective we are.
7 I mean, obviously it's up to the Commission. The
8 Commission will make their decision based on the
9 entire record, and I don't -- unfortunately, I
10 don't live here in North Dakota. It seems like a
11 really good place to live, especially compared to
12 where I come from, and I don't pay an electric bill
13 at Montana-Dakota Utilities and I don't live
14 next-door to the Heskett plant, so we tried to
15 offer an objective analysis.

16 Some of the issues that we've noticed the
17 company agrees with, there are some that they
18 don't, but I think we've done the best job we can
19 of trying to point out the issues, and I thank you
20 for the opportunity to do that.

21 MR. GRUMAN: Thank you, Mr. Hahn. I have
22 no further questions.

23 JUDGE WAHL: Mr. Kuntz?

24 MR. KUNTZ: Just one.
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RECROSS-EXAMINATION

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BY MR. KUNTZ:

Q. Mr. Hahn, in response to Commissioner Kalk's question about whether deliverability was the biggest variable here, did you neglect the WAPA transmission charges in that response?

A. Well, I included those in there, Mr. Kuntz. I'm sorry if I wasn't clear on that.

MR. KUNTZ: Thank you.

JUDGE WAHL: Nothing further, Mr. Kuntz?

MR. KUNTZ: No.

JUDGE WAHL: Ms. Jeffcoat-Sacco?

MS. JEFFCOAT-SACCO: He answered my question.

JUDGE WAHL: Any followup questions from the Commission?

COMMISSIONER CLARK: I do have just one.

JUDGE WAHL: Commissioner Clark.

FURTHER EXAMINATION

BY COMMISSIONER CLARK:

Q. You talked about a deliverability analysis. I don't know if this is anywhere else in the record, but this would be an opportunity to supplement it. Could you describe exactly what is included in the deliverability analysis, or is this

1 something that just within the community of
2 planners is known exactly what that encompasses, or
3 is it a loose term?

4 A. No, I can describe it for you. I mean,
5 it's more often associated with new resources, so
6 if someone says I want to build a power plant here
7 and I want to interconnect with the grid, utilities
8 and organizations like MISO have procedures for
9 studying whether that can be -- whether they can
10 interconnect there without causing problems or
11 overloads or voltage violations on the system.

12 And so, you know, the analysis that I
13 described is something like that. You can look at
14 this system and find out, hey, if I tried to inject
15 power in Illinois and withdraw in Montana -- or in
16 North Dakota, what would that do to the system, and
17 can the system actually effect that transaction?
18 And so it's done by analyzing the system using
19 power flow software and it's not a -- I mean,
20 it's --

21 Q. So these are the feasibility studies --

22 A. Yes.

23 Q. -- that MISO conducts?

24 A. Yes, exactly. That's why when you ask for
25 transmission service, that's what MISO does.

1 COMMISSIONER CLARK: Okay. Thank you.

2 JUDGE WAHL: Further questions from the
3 Commission? Followup, Mr. Gruman?

4 MR. GRUMAN: No, Your Honor.

5 JUDGE WAHL: Mr. Kuntz?

6 MR. KUNTZ: No.

7 JUDGE WAHL: Ms. Jeffcoat-Sacco?

8 MS. JEFFCOAT-SACCO: No.

9 JUDGE WAHL: Thank you very much, Mr.
10 Hahn.

11 THE WITNESS: It's always a pleasure, sir.

12 JUDGE WAHL: It looks like it.

13 THE WITNESS: It is. I mean it.

14 JUDGE WAHL: Madam reporter, I know I'm
15 pushing it, but just bear with me a bit.

16 Anything further, Mr. Gruman?

17 MR. GRUMAN: Yes. I have a few questions
18 for Darcy Neigum.

19 JUDGE WAHL: Yes, of course. You know,
20 let's recess for -- let's recess for 10 minutes --
21 we've been at this quite a while -- for the
22 reporter, and for the rest of us actually. Ten
23 minutes until about five after four.

24 (Recess taken.)

25 JUDGE WAHL: All right. Let's be in

1 order, please. Mr. Gruman, when you're ready.

2 MR. GRUMAN: Advocacy staff calls Darcy
3 Neigum.

4 **DARCY J. NEIGUM,**

5 having been previously duly sworn, was examined and
6 testified as follows:

7 JUDGE WAHL: Mr. Neigum, you understand,
8 of course, that your testimony continues under oath
9 and subject to penalties of perjury?

10 THE WITNESS: Yes, I do.

11 JUDGE WAHL: Mr. Gruman.

12 MR. GRUMAN: Thank you, Your Honor.

13 **RE-CROSS-EXAMINATION**

14 **BY MR. GRUMAN:**

15 Q. I just have one question, Mr. Neigum.
16 There's been a plethora of discussion today
17 concerning WAPA IS costs. My question is whether
18 or not MDU has promulgated any work papers in this
19 regard concerning the WAPA IS costs and whether
20 those have been submitted into the record.

21 A. We have not submitted any work papers into
22 the record regarding that issue.

23 Q. Have you promulgated any documents in that
24 regard concerning the WAPA IS costs?

25 A. We have -- as I said -- or as I indicated

1 earlier, we've done studies. The last study was as
2 late as 2009 when we looked at the capabilities on
3 the system as far as system intact and as far as in
4 a contingency situation as far as being able to
5 serve load, particularly in the Bismarck-Mandan
6 area.

7 MR. GRUMAN: Well, advocacy staff would
8 then, I guess, request concerning a late-filed
9 exhibit whether or not that could be submitted into
10 the record for the Commissioners' review.

11 JUDGE WAHL: All right. This is a
12 late-filed exhibit by advocacy staff. This would
13 be RS -- I'm sorry -- RSH -- do you want to be
14 consistent or do you want to change your exhibits?

15 MR. GRUMAN: They should all be RSH.

16 JUDGE WAHL: All right. Fine. RSH-13.

17 And, Mr. Gruman, how do you wish to have the
18 exhibit described?

19 MR. GRUMAN: 2009 capability study unless
20 you feel there's a more appropriate label, Mr.
21 Neigum.

22 THE WITNESS: The one I was thinking in my
23 mind, I believe, if I remember, deals with a load
24 study in the Bismarck-Mandan area, which I think is
25 really applicable if we're talking about a resource

1 that's located here.

2 MR. GRUMAN: So maybe Bismarck-Mandan 2009
3 capability study?

4 THE WITNESS: That would be fine.

5 JUDGE WAHL: All right.

6 MR. GRUMAN: Umm --

7 JUDGE WAHL: Just a minute.

8 MR. GRUMAN: Yep.

9 JUDGE WAHL: Mr. Kuntz.

10 MR. KUNTZ: Your Honor, I spoke too early
11 before. On reconsideration we do have several
12 questions for Mr. Neigum --

13 JUDGE WAHL: No. Just a minute.

14 MR. KUNTZ: -- as followup, but I can do
15 those now or I can recall him.

16 JUDGE WAHL: No.

17 MR. KUNTZ: Are you asking as to the
18 late-filed exhibit?

19 JUDGE WAHL: Yes.

20 MR. KUNTZ: Oh, no objection to that.

21 JUDGE WAHL: Now, we're on the track.

22 Ms. Jeffcoat-Sacco?

23 MS. JEFFCOAT-SACCO: No objection.

24 JUDGE WAHL: All right. Exhibit --

25 Exhibit RSH-13 -- Bismarck-Mandan 2009 capability

1 study marked for the record as RSH-13 is received.

2 Now, Mr. Gruman, anything further?

3 MR. GRUMAN: I have one further request.

4 Would it be possible for MDU also to submit into
5 the record a copy of the WAPA IS agreement -- the
6 most current WAPA IS agreement?

7 MR. KUNTZ: IS agreement?

8 MR. GRUMAN: Mm-hmm.

9 THE WITNESS: The WAPA transmission
10 service or the WAPA IS agreement for NIT service?

11 MR. GRUMAN: Whichever one, I guess, you
12 based your costs upon. So I guess both, but if one
13 or the other, then I guess that's the one we're
14 most -- we find most relevant in what we're
15 requesting.

16 THE WITNESS: The existing agreement --
17 are we talking about the historical one that
18 expires which would show what our, at least,
19 capabilities or how much usage we're basically
20 sharing between? And if we talk about the other
21 agreement, it talks about how we're taking service
22 and basically paying the WAPA network service rate
23 today for loads above the -- what I would call our
24 historical transmission service agreement.

25 MR. GRUMAN: We'll take both.

1 THE WITNESS: That should be fine.

2 MR. GRUMAN: Thank you.

3 MR. KUNTZ: How would you describe those,
4 Darcy. This is RSH-14 then?

5 JUDGE WAHL: 14, that's correct.

6 THE WITNESS: It would be the WAPA
7 transmission service -- MDU WAPA transmission
8 service agreement. It's the BAO 308 agreement.

9 MR. KUNTZ: And that's one agreement then?

10 THE WITNESS: Correct, with many exhibits.
11 Then there is another agreement, which would be a
12 network transmission service -- WAPA network
13 transmission service agreement.

14 JUDGE WAHL: I take it MDU does not
15 object, Mr. Kuntz?

16 MR. KUNTZ: No objection.

17 JUDGE WAHL: And, Ms. Jeffcoat-Sacco?

18 MS. JEFFCOAT-SACCO: No objection. Is
19 that going to be one exhibit or two?

20 JUDGE WAHL: One. Anything further, Mr.
21 Gruman?

22 MR. GRUMAN: I have nothing further, Your
23 Honor.

24 JUDGE WAHL: Followup, Mr. Kuntz.

25 MR. KUNTZ: As I indicated, Your Honor, I

1 have some questions for Mr. Neigum in response to
2 Mr. Hahn's testimony. I can do those now or we can
3 recall him.

4 JUDGE WAHL: I don't see any reason to go
5 through the formality.

6 MR. KUNTZ: I don't, either.

7 JUDGE WAHL: Mr. Gruman, any objection?

8 MR. GRUMAN: No, Your Honor.

9 JUDGE WAHL: Ms. Jeffcoat-Sacco?

10 MS. JEFFCOAT-SACCO: No.

11 JUDGE WAHL: No. Of course not. Proceed,
12 Mr. Kuntz.

13 **REDIRECT EXAMINATION**

14 **BY MR. KUNTZ:**

15 Q. Mr. Neigum, does Montana-Dakota study
16 system reliability?

17 A. Yes, we do. As Mr. Hahn described that,
18 as far as for both the Midwest Reliability
19 Organization and for the MISO, we do at a minimum
20 annual reliability planning that we do with the MRO
21 and with MISO, and so those do have the year out,
22 five-year, ten-year as far as the future forecasts
23 that we do. And we also do reliability studies at
24 least -- less than annual if we've got certain
25 loads that we're looking at again on our system as

1 far as point of delivery or service.

2 Q. You heard the testimony of Ms. Stomberg
3 about one of the benefits of locating this CT near
4 the Heskett Station or near the Bismarck-Mandan
5 load was that it was an improvement of reliability?

6 A. Correct.

7 Q. Is that the same sort of reliability that
8 you're studying when you look at reliability
9 studies?

10 A. It provides for reliability. It doesn't
11 provide a solution to the reliability criteria
12 problem or violation that's out there, so it
13 basically adds to the reliability that we would
14 have in the area.

15 Q. It's not correcting kind of a reliability
16 issue that is out there, it just kind of adds to or
17 improves reliability; would that be a fair way to
18 characterize it?

19 A. Yes, it would.

20 Q. You heard Mr. Hahn's testimony stating
21 that energy flow into MISO is generally from west
22 to east and that minimizes the likelihood that
23 Montana-Dakota would be unable to utilize the
24 Illinois capacity?

25 A. Correct.

1 Q. Do you agree with that?

2 A. I don't, because, you know, if we look at
3 MISO in at least North Dakota, one of the things
4 that happens, at least is on peak, and the way that
5 MISO models, that there are flows that basically
6 come back into this region. Part of that gets back
7 to a predominant -- the majority of the generation
8 in the area deals with WAPA and Basin and, as we've
9 seen, a lot of the facilities deal with the
10 integrated system, or the IS. So flows, even
11 though at times they may go from east to west,
12 particularly when you study on peak, which is when
13 you look at capacity resource studies or if you
14 would also look at transmission service requests,
15 you basically study those on peak in those
16 situations, in which case the flow may not be from
17 east to west, particularly out here in MDU's
18 service territory.

19 Q. From west to east?

20 A. East, correct. From west to east.

21 Q. And do you recall Mr. Hahn's testimony
22 regarding loop flow capability or applicability
23 with respect to the WAPA charges and discussions
24 that we had with staff following your rebuttal
25 testimony regarding the WAPA charge?

1 A. Yes.

2 Q. Can you tell us your recollection of that
3 discussion regarding loop flows?

4 A. Sure. We had a conversation, we were
5 talking about the two proposals, the North Dakota
6 proposal and the Illinois proposal, and we started
7 out with a conversation talking about the North
8 Dakota proposal. We've already talked a little bit
9 about -- I described the issue at Hettinger and as
10 far as the concern on our system there as far as
11 flows want to go south out of there and one of the
12 concerns as far as the potential for additional
13 WAPA charges because of flows on the WAPA
14 integrated system, and Mr. Hahn characterized that
15 or asked if that was a loop flow situation, and I
16 agreed with that, that that's what they're
17 concerned about in that situation.

18 As we talked about from the North Dakota
19 wind proposal, it was a loop flow. Then we talked
20 later after that about the additional transmission
21 service or network transmission service at Heskett,
22 which is not a loop flow issue, which is more of a
23 load serving issue.

24 Q. And, again, without beating this issue to
25 death, what's the difference between a load flow

1 versus loop flow -- or load service versus loop
2 flow issue?

3 A. The loop flow is basically flow that you
4 have on someone else's system, basically
5 neighboring interconnected systems. When we talk
6 more about this study and we talk about network
7 service, we're talking about the ability to serve
8 load basically from transmission facilities that
9 either you own or you're connected to.

10 Q. And why didn't the company describe this
11 WAPA NITS service -- network service in either its
12 application or its IRP as a relevant consideration
13 in its selection of the CT?

14 A. I guess the issue for discussion came up
15 when we had received Mr. Hahn's direct testimony,
16 because he had pulled up the off-system resource
17 that we would have had as far as relating to the
18 Illinois proposal. At that place, when we started
19 looking at that off-system resource, all of a
20 sudden from our standpoint, then it was, well, is
21 there any additional cost adders as we're doing the
22 side-by-side. So we looked at that issue. That's
23 when it became relevant as far as from a
24 conversation. You know, we did not include that as
25 a credit when we talked about the other simple

1 cycle, combined cycle resources that we had along
2 the Minnesota border that we modeled because they
3 weren't picked as far as in a least-cost scenario.
4 So it only became relevant with Mr. Hahn's direct
5 testimony that we look to include that or try to
6 quantify additional costs associated with that
7 proposal.

8 Q. There was also the suggestion that
9 Montana-Dakota's RFP bids may have been biased
10 against out-of-state resources or that we weren't
11 selecting out-of-state resources and, therefore,
12 not getting real responses to our RFP. Has the
13 company basically excluded out-of-state resources
14 in its response to RFPs?

15 A. We have not.

16 Q. Would you explain, give examples of
17 out-of-state resources that's utilized?

18 A. Sure. The out-of-state would end up being
19 like the agreement that we have with Northern
20 States Power, would be an out-of-state agreement
21 that we have, the agreement with We Energies that
22 we have is basically an out-of-state resource, and
23 the other one that we've currently signed is on the
24 demand response program, is actually with
25 Constellation NewEnergy, who is an out-of-state

1 company.

2 Q. Have you received any feedback from RFP
3 bidders about -- that MDU's RFP process is unfair
4 or that it should be changed in some respect?

5 A. We have not.

6 Q. Explain how the local generation, the
7 benefit that Ms. Stomberg explained, provides a
8 reliability benefit to load.

9 A. With the location of generation near load,
10 there's the reliability benefit that's provided
11 from that resource to be able to serve that load,
12 one, from a delivery standpoint. The other one is
13 a generation resource runs, it can be used for
14 voltage support, particularly in the case where
15 you're relying on long transmission lines so you
16 don't have resources in the area so it can avoid
17 other facilities, or the other one that a
18 generation resource can also offset, the need for
19 transmission or to mitigate transmission outages or
20 congestion on the system.

21 Q. Do you agree with Mr. Hahn's description
22 of capacity zone differences in terms of ability to
23 utilize credits?

24 A. No. My reading of the MISO tariff as it
25 deals with credits and it deals with the market

1 prices, themselves, is that all those prices will
2 basically be settled within the zones that they're
3 located, and the only way to move credits or to
4 have some financial hedge is through the provisions
5 I talked about, if it's the opt-out self-scheduling
6 or in the case of an off-system resources through a
7 grandmothers agreement.

8 Q. So in your opinion, then would the
9 company, in the absence of having that transmission
10 resource between zone 1 and zone 4, be able to use
11 the Illinois credits for its zone 1 requirements?

12 A. It would certainly provide a limitation or
13 at least it would not provide us any sort of
14 financial protection.

15 Q. Is the -- what's the time limit for exit
16 from MISO? Is it five years as testified by Mr.
17 Hahn?

18 A. No. It's a one-year notice.

19 Q. And how could the company use a MISO
20 credit, for example, in Illinois if it were no
21 longer a MISO member?

22 A. We'd either be in the position of just
23 strictly selling it into the market and taking what
24 the auction would provide at that time or we'd have
25 to rely on getting a transmission service request

1 and moving that resource from Illinois to our
2 system, which would be an off-system site for MISO.

3 Q. Then I would like to touch on, can you
4 explain why the combined cycle was not selected in
5 the model?

6 A. It's not selected because it's not
7 economical.

8 Q. Why is it not economical?

9 A. Because the combined cycle resources
10 typically run in a situation where you have higher
11 market prices, you expect those resources to run
12 more than peaking and so it justifies the
13 additional cost expenditures of putting that steam
14 cycle on and that steam turbine, and so from the
15 standpoint of our system and what we're forecasting
16 in our needs, it's not economical to add that
17 combined cycle resource at this time, nor did the
18 model select it.

19 Q. And based upon the least-cost modeling and
20 the way you're projecting growth and energy needs
21 and capacity needs, the model is not selecting a
22 combined cycle unit within the planning terms of
23 the model; is that correct?

24 A. That's correct.

25 Q. But the location of that combustion

1 turbine, whether it's at Heskett or anyplace else,
2 offers you the opportunity to do a combined cycle
3 unit at some point in the future?

4 A. Correct. So in the future when something
5 comes along that causes us to look at the
6 retirement of the Unit 1 boiler at Heskett, then at
7 that point we're in the decisionmaking do we retire
8 the unit and just get rid of everything, or at that
9 point we've got that optionality to see if the
10 model would select it as a combined cycle resource
11 in the future.

12 Q. And at this point do you have the
13 retirement of Heskett 1 included in your EGEAS
14 modeling?

15 A. We do not.

16 Q. So in 10 or 15 years from now the decision
17 is made that you're going to have to do something
18 with Heskett 1 because of environmental concerns or
19 whatever and you now model that, might that
20 influence whether or not a combined cycle is
21 selected then at that time?

22 A. It would be able to select that synergy if
23 it was economical compared to other resources.

24 Q. As a replacement for that Heskett 1
25 resource?

1 A. Correct.

2 Q. Did the 2010 RFP require deliverability of
3 full capacity to the MDU system for proposals that
4 rely on resources outside the MDU system?

5 A. There was a requirement that we did have
6 in the bid as far as that any off-system resource
7 needed to have deliverability to MDU's system.

8 Q. And how did the Illinois proposal respond
9 to that requirement?

10 A. Their resource was located in Illinois and
11 the pricing would be paid basically at the Illinois
12 node or nodal price.

13 Q. So they didn't provide any deliverability
14 issues then?

15 A. No. No, they did not.

16 Q. Are transmission service requests issued
17 on a counterflow analysis?

18 A. No. MISO actually when they look at
19 transmission service requests, they have a separate
20 model for that, and counterflow is not one of the
21 things that I'm aware of that they consider for
22 that, but basically look at all the other prior
23 reservations and requests that had been issued out
24 there.

25 Q. And then, finally, if you were to do a

1 deliverability analysis study, what would it
2 provide?

3 A. If you would do a deliverability study, it
4 would tell you if you had the ability to enter into
5 or contract for a transmission service request or
6 would tell you the level of network upgrades you
7 had to spend to receive that, but the only way you
8 get to use that ability that comes from that
9 deliverability study is to pay for that
10 transmission service request.

11 MR. KUNTZ: That's all I have.

12 JUDGE WAHL: Ms. Jeffcoat-Sacco?

13 MS. JEFFCOAT-SACCO: I don't have any
14 questions. Thanks.

15 JUDGE WAHL: Questions from the
16 Commission. Commissioner Clark.

17 **FURTHER EXAMINATION**

18 **BY COMMISSIONER CLARK:**

19 Q. Can you say that last point one more time
20 so I understand it, because I think it gets to the
21 question that Mr. Hahn had raised and, gosh, you
22 see this great price for --

23 A. Sure.

24 Q. -- that you received on this Illinois bid,
25 why not follow up on that more and do a

1 deliverability study? Say that one more time --

2 A. Sure.

3 Q. -- and maybe add context to it.

4 A. Well, the deliverability study is --
5 there's kind of -- if we talk about from -- we're
6 looking at it as a transmission service request
7 because we're talking about resources that are
8 already built, they're interconnected, they have
9 those pieces in place, so our load exists and their
10 generation exists.

11 What we're really trying to say, is there
12 a transmission path between those points. So the
13 tariff allows you to make a request for a
14 transmission service request.

15 In doing that MISO looks at their model of
16 all the other transmission service requests that
17 they have on the system and, basically using their
18 power flow models, they basically determine is
19 there an ability to grant another resource at least
20 on that path or what effect does it have. So they
21 have to take into account all the other studies
22 that are out there and as far as how the system,
23 itself, flows. And so in doing that, it's not just
24 saying that energy flows from west to east, so that
25 if you just have a request that's counter to it or

1 a counterflow request, it basically nets out
2 against some other delivery.

3 Q. So what's the impediment then to MDU
4 requesting that or what's the reason to not?

5 A. I wouldn't say that it's not. What
6 happens is in order to -- if you do that study, all
7 it does is it does it at a snapshot in one time and
8 says would you be able to get this transmission
9 service request. Other than just saying, yeah, we
10 looked at it one time, it doesn't provide, as in
11 the case of this grandmothers agreement, at least
12 the path to move that capacity or to utilize that
13 capacity from zone 4 to zone 1 unless you enter
14 into and start paying for that transmission service
15 request, which has an annual cost.

16 Q. Is the annual cost knowable upfront or is
17 that a --

18 A. It's a tariff --

19 Q. -- risk that you kind of don't know what
20 the cost would be on the back end once you --

21 A. No, we end up knowing that cost, and I
22 think I had described that before. It's the MISO
23 Schedule 7, their point-to-point firm transmission
24 rate, and that cost, because you're going across
25 the MISO footprint, is \$2.44 a kW-month, and that

1 changes annually.

2 Q. I'm sorry. You said 2.44 per --

3 A. kW-month.

4 COMMISSIONER CLARK: Okay. Thanks.

5 JUDGE WAHL: Further questions from the
6 Commission? Commissioner Cramer.

7 **FURTHER EXAMINATION**

8 **BY COMMISSIONER CRAMER:**

9 Q. I just have one. With regard to -- if I'm
10 to accept the -- I think I do accept the notion
11 that a highly dispatchable 88 megawatt plant in
12 Mandan enhances reliability in the metro area,
13 certainly more than, you know, a purchase power
14 agreement from Illinois, how reliable is reliable
15 enough?

16 A. When we look at reliability, certainly we
17 look at our system today, and as we look out
18 through growth and through other projects that are
19 added, keep looking at various contingency
20 scenarios that exist.

21 So in the case, if we go back to December
22 5th of last year when we had the issue in
23 Bismarck-Mandan, you know, we have the potential
24 for issues at times. Because of the way that the
25 system in Bismarck-Mandan is set up, there's

1 basically a 115 ring that goes around town. So
2 it's that 115 loop that really serves all the load
3 in Bismarck-Mandan. And the generation at Heskett
4 Station is located on that 115 ring.

5 What happens is for additional
6 transmission support, there's a 230 connection that
7 we have over at the Heskett Station and there's
8 also one that we have over at the east Bismarck
9 substation. So typically we've got ample
10 generation, we've got this 115 ring that's
11 connected, we've got a 230 connection to 115
12 connection over at Heskett, and we also have a 230
13 to 115 connection over at east Bismarck.

14 And where we ended up with is we had -- a
15 generator step-up transformer for Unit 1 at Heskett
16 failed, and when it did that, it caused Unit 2 to
17 trip off line because the fault was so close in,
18 located to the other generator, and subsequent to
19 that we lost -- the 230 to 115 transformer failed
20 on the 230 connection that we had over at Heskett.
21 So we've got two contingencies or two failures that
22 have occurred.

23 And so what happened then is we were
24 looking at all of this load because we had no
25 generation on the 115 ring, this basically all

1 being served from what we had being imported in
2 from WAPA east Bismarck. And that connection over
3 there has two hundred MVA transformers, so
4 basically there were two hundred megawatt
5 transformers. And the concern ended up being if we
6 lost one of those transformers, another failure or
7 we lost the tie to WAPA from that 230 to 115 ring,
8 we basically wouldn't have been able to serve load
9 in Bismarck-Mandan, so that would have been the
10 third failure.

11 Q. Forgive me, but it seems like you just
12 described a situation where the lack of geographic
13 diversity created the problem, would have not
14 solved it.

15 A. Well, it actually helps, because the
16 generator, itself, as we're planning to locate it
17 on the 115 ring. So from the standpoint of having
18 another resource that we could have started
19 quickly. The problem with the Heskett units, the
20 one -- the GSU had failed so we couldn't start Unit
21 1. Unit 2, being a fluidized bed, takes almost 24
22 hours to basically bring it back. So we were
23 scrambling and waiting until we could get that
24 additional generator on over at Heskett Station.
25 So if we end up having a fast-start resource that

1 we would have had, we would have started that,
2 placed it on line, you know, within 30 minutes and
3 we wouldn't have had any requests for consumers to
4 conserve.

5 COMMISSIONER CRAMER: Very good. Thank
6 you. All I could say is that there are a bunch of
7 people in Fargo that would die to have that kind of
8 a system. Anyway, that's another utility.

9 JUDGE WAHL: Commissioner Clark.

10 **FURTHER EXAMINATION**

11 **BY COMMISSIONER CLARK:**

12 Q. I remember what my other question was. I
13 wanted to talk about Heskett. Heskett 1 operates
14 as base load resource; is that correct?

15 A. It is a base load resource, but both those
16 units, Heskett 1 and Heskett 2, will cycle as far
17 as the MISO dispatches it.

18 Q. Sure. So if looking down the road and one
19 of the flexibilities that's presented, whatever,
20 10, 15, 20 years down the road and there has to be
21 a decision made on Heskett 1 since it's an older
22 unit, if it's to be replaced by a combined cycle
23 combustion unit, which would require a waste heat
24 recovery system on the -- so on and so forth, would
25 the nature of this particular 88 megawatt unit need

1 to change? Does that question make any sense?
2 Because if it's -- and maybe I'm totally
3 misunderstanding how these combined cycle units
4 work, but would it need to be running more
5 constantly to really replace what's provided by
6 Heskett 1?

7 A. And that's part of -- you'd go back in as
8 far as what's the economics of it. See, because
9 the unit, itself, if you had a combined cycle unit,
10 can still run as a simple cycle turbine if you just
11 needed it for peaking or if you wanted it to stay
12 on longer or energy prices called on it, you could
13 basically put the steam turbine on.

14 But if you wanted it to run in a combined
15 cycle mode and it would replace something as a base
16 load because the market required it or pricing,
17 then basically you would go from a peaking to
18 probably, you know, an intermediate peaking,
19 something you would start up and shut down every
20 day.

21 Q. Okay. And the unit as designed has that
22 capability in it, just from an engineering
23 standpoint?

24 A. It has that ability to start up and shut
25 down daily or as needed.

1 forced us to take some of our other lower-priced
2 marginal units and either shut them off or be at
3 risk that we'd be in the market, you know, and not
4 be able to economically sell them.

5 Q. So when the companies submit their RFP,
6 then do you send them back, this is why it wasn't
7 carried forward so they get some feedback as to
8 what caused their proposal not to be carried
9 forward?

10 A. Well, we will send them a letter back at
11 least saying they have been notified if they're
12 shortlisted or if they're -- at some point if
13 they're ultimately, you know, rejected or thrown
14 out of the process. You know, we have engaged,
15 depending on the entity, from time to time as far
16 as, you know, feedback we might give them.
17 Sometimes depending on where you're at in the
18 process might, you know, have some sort of trade
19 secret information or you're providing, you know,
20 market information to them you probably shouldn't.

21 JUDGE WAHL: Further questions from the
22 Commission? Followup, Mr. Gruman?

23 **RECROSS-EXAMINATION**

24 **BY MR. GRUMAN:**

25 Q. Mr. Neigum, there's been some reference to

1 a deliverability study. How much does a
2 deliverability study cost?

3 A. I think they're \$20,000.

4 MR. GRUMAN: I have no further questions.

5 JUDGE WAHL: Mr. Kuntz?

6 MR. KUNTZ: Nothing further.

7 JUDGE WAHL: Ms. Jeffcoat-Sacco?

8 MS. JEFFCOAT-SACCO: Nothing further.

9 JUDGE WAHL: Any followup from the
10 Commission?

11 If not, thank you very much, Mr. Neigum.

12 Mr. Gruman, anything further?

13 MR. GRUMAN: No, Your Honor.

14 JUDGE WAHL: Mr. Kuntz, any further
15 rebuttal?

16 MR. KUNTZ: No, Your Honor.

17 JUDGE WAHL: Ms. Jeffcoat-Sacco, anything
18 further?

19 MS. JEFFCOAT-SACCO: No. Thank you.

20 JUDGE WAHL: All right. Closing comments
21 from the Commission. Commission Chairman Tony
22 Clark.

23 COMMISSIONER CLARK: Just thank everyone
24 for a good hearing, very interesting and a lot of
25 information for the Commission to sort through. Of

1 course, we have a few late-filed exhibits that will
2 be coming in, so look forward to getting those and
3 having an opportunity to sit down and talk about it
4 at some point in the future. Thanks.

5 JUDGE WAHL: Commissioner Cramer.

6 COMMISSIONER CRAMER: Just the same thanks
7 everyone for a job well done on all sides. And I
8 can see why we didn't have a settlement agreement
9 in front of us, and I think that's just as well,
10 quite honestly. I appreciate the opportunity for
11 an advance determination.

12 As you know, I think, especially that
13 since there is a presumption, it's especially
14 helpful and I'm grateful it was brought to this
15 point and that we had this opportunity because
16 there's a couple of important questions to answer.
17 I think once we -- I think we have to nail down at
18 some point whether this Illinois PPA ensures zone 1
19 capacity, and we're going to have to get some
20 assurance in my mind of that question. But look
21 forward to the late-filed exhibits and ongoing
22 discussion.

23 JUDGE WAHL: Commissioner Kalk.

24 COMMISSIONER KALK: Just thank you for
25 your work. I found the discussion today, I'll use

1 the word, fascinating because it's interesting to
2 me that there's companies that are generating in
3 the central part of the country that are willing to
4 send their energy all the way out here. So I don't
5 know if this is a trend that's going to be here for
6 many, many years or if this is just something
7 that's short term because of economic downturns.

8 I think the whole model -- I think for the
9 Commission at some point in time, in sitting down
10 and looking at some of the ways that we've run in
11 the past 20, 30, 40, 50 years of how we regulate
12 utilities, maybe needs to change and some of those
13 things today I think became kind of apparent.

14 So thank you for your work today. I look
15 forward to the first work session on this.

16 JUDGE WAHL: Mr. Kuntz, anything further
17 for the record?

18 MR. KUNTZ: No, Your Honor. We would
19 thank the Commission for the time. Obviously we
20 believe that this is the best resource for us. We
21 believe it's the least-cost resource when you
22 consider the risk of maybe not being able to use
23 those credits, not to mention when you start
24 getting into things like the WAPA charge and the
25 other benefits that this particular project brings.

1 We're not afraid of power purchase
2 agreements. We've entered into power purchase
3 agreements for 30-some years to meet our capacity
4 and we'll look at them when they make sense, but
5 when you look at where the market is at today and
6 the questions that are out there, it was just too
7 big a risk for us to sign up for that much capacity
8 from an area that we weren't sure we were going to
9 be able to get here. And I would hate to have been
10 in a rate case four years from now and try to
11 convince the Commission we ought to get recovery
12 for that Illinois resource that we weren't able to
13 utilize to serve our customers and, in the
14 meantime, we're having to bid in the MISO auction.
15 And maybe that was a small risk, but it's a risk
16 nonetheless.

17 And then when you consider the other costs
18 of -- the WAPA costs that this turbine brings, the
19 cost of delivering this capacity to North Dakota if
20 you're able to use it, it just really wasn't a
21 viable resource at this time.

22 Now, maybe the market will evolve. Maybe
23 the congestions will go away and maybe someday
24 capacity in Florida will be universally deliverable
25 as capacity in North Dakota, but it's not there

1 yet, and there's nobody, absolutely no one, that
2 can assure us for the life of that contract that we
3 would be able to use those capacity credits in our
4 service territory. I mean, they might look good
5 right now, but there is nobody that can assure you
6 that that's going to happen, whereas we are assured
7 if we build a resource on our system, we're going
8 to be able to use it for the life of that resource.

9 I think just to address a comment
10 Commissioner Cramer made about is this really
11 designed to do a combined cycle, why aren't we
12 talking combined cycle, I think Mr. Neigum
13 indicated combined cycle right now does not make
14 economic sense, and it may never make economic
15 sense.

16 But that being said, I don't think when
17 you've got options in front of you, you don't think
18 about what might happen in 20 years and if you can
19 locate at A or B or you can do C or D and you might
20 have some options that might make economic sense in
21 the future, I think you put those on the plate and
22 it's an added benefit. It gives you some
23 flexibility you might not otherwise have rather
24 than waiting 10 years and then kicking yourself,
25 you know, why didn't we put this thing over at

1 Heskett when we had this opportunity knowing what
2 we know right now.

3 So do we have plans to convert this to a
4 combined cycle, no. Based upon what we know right
5 now, it wouldn't make economic sense. Five, ten
6 years from now, it might well. But before we do
7 that, we'll be back before this Commission and
8 we'll have to convince you that it makes sense.
9 But if we build a combined cycle, I think in any
10 instance it would make sense to have it at Heskett
11 than it would anyplace else on our system.

12 Then there's just all the other benefits
13 that flow from having an on-system resource as
14 opposed to something in Illinois.

15 So we appreciate your attention. I think
16 this is a -- I found it somewhat fascinating
17 learning about this new resource planning
18 construct. I've certainly learned a lot over the
19 last couple months and we appreciate your
20 attention.

21 JUDGE WAHL: Mr. Gruman, anything further
22 for the record?

23 MR. GRUMAN: Your Honor, likewise,
24 advocacy staff thanks the Commission. I'll reserve
25 my closing for written final arguments. Before we

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CERTIFICATE OF COURT REPORTER

I, Denise M. Andahl, a Registered
Professional Reporter,

DO HEREBY CERTIFY that I recorded in
shorthand the foregoing proceedings had and made of
record at the time and place hereinbefore
indicated.

I DO HEREBY FURTHER CERTIFY that the
foregoing typewritten pages contain an accurate
transcript of my shorthand notes then and there
taken.

Bismarck, North Dakota, this 6th day of
February, 2012.

Denise M. Andahl
Registered Professional Reporter

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