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THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF SOUTH DAKOTA

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IN THE MATTER OF THE COMPLAINT  
BY OAK TREE ENERGY, LLC, AGAINST  
NORTHWESTERN ENERGY FOR REFUSING  
TO ENTER INTO A PURCHASE POWER  
AGREEMENT

EL11-006

= = = = =

Transcript of Proceedings  
December 5 & 6, 2012

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BEFORE THE PUBLIC UTILITIES COMMISSION,  
CHRIS NELSON, CHAIRMAN  
KRISTIE FIEGEN, VICE CHAIR  
GARY HANSON, COMMISSIONER

COMMISSION STAFF  
John Smith  
Karen Cremer  
Greg Rislov  
Brian Rounds  
Tina Douglas  
Sherry Dickerson

APPEARANCES  
Michael Uda, Oak Tree  
Yvette LaFrentz, Oak Tree  
  
Al Brogan, NorthWestern Energy  
Tim Olson, NorthWestern Energy

Reported By Cheri McComsey Wittler, RPR, CRR

1                   TRANSCRIPT OF PROCEEDINGS, held in the  
 2 above-entitled matter, at the South Dakota State  
 3 Capitol Building, Room 413, 500 East Capitol Avenue,  
 4 Pierre, South Dakota, on the 5th and 6th days of  
 5 December, 2012, commencing at 9 o'clock a.m., December 5,  
 6 2012.

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11	NWE WITNESSES	DIRECT	CROSS	RD	RC
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	Steve Lewis	104	111	174	175
13	Bleau LaFave	176	179	235	241
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16					
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23 (Oak Tree Exhibits 9 through 22 are marked)  
 24 (NorthWestern Exhibits 10 through 16 are marked)  
 25 (Staff Exhibits 2 through 8 are marked)

1           CHAIRMAN NELSON: We will call the hearing to  
2 order. We are at the point of beginning the second  
3 hearing following the Commission's Interim Order and  
4 Order On Reconsideration of Docket EL11-006, In the  
5 Matter Of The Complaint by Oak Tree Energy, LLC Against  
6 NorthWestern Energy For Refusing To Enter Into A Power  
7 Purchase Agreement.

8           The time is 9 a.m. The date is December 5,  
9 2012, and the location of the hearing is in Room 413,  
10 State Capitol, Pierre, South Dakota.

11           My name is Chris Nelson, Chairman of the  
12 Commission. Commissioners Kristie Fiegen and Gary Hanson  
13 are also present.

14           I am presiding over this hearing. This hearing  
15 was noticed pursuant to the Commission's Order For And  
16 Notice of Hearing issued on October 15, 2012.

17           The issues at this hearing as stated in the  
18 notice are, number one, the proper application of the  
19 hybrid method with no inclusion of carbon costs; number  
20 two, the proper natural gas inputs to use in the hybrid  
21 method based on market conditions and projections as of  
22 February 25, 2011, the date on which a legally  
23 enforceable obligation was created; number three, the  
24 proper electric market rates that the parties may deem  
25 warranted reflecting market conditions and projections as

1 of February 25, 2011; number four, the proper capacity  
2 contribution and resulting capacity credits to be  
3 included in the avoided cost and added into the hybrid  
4 method under the Titan 1 method; and, number five,  
5 NorthWest Energy's avoided cost levelized over a 20-year  
6 period. Complainant, Oak Tree, has the burden of proof  
7 to demonstrate its right to the relief requested.

8 All parties have the right to be present and to  
9 be represented by an attorney. All persons testifying  
10 will be sworn in and subject to cross-examination by the  
11 parties. The Commission's final decision may be appealed  
12 by the parties to the State Circuit Court and State  
13 Supreme Court.

14 John Smith, the Commission's counsel, will act  
15 as Hearing Examiner and will conduct the hearing subject  
16 to the Commission's oversight. He may provide  
17 recommended rulings on procedural and evidentiary  
18 matters. The Commission may overrule its counsel's  
19 preliminary rulings throughout this hearing. If not  
20 overruled, the preliminary rulings will become final  
21 rulings.

22 With that, I'll turn it over to Mr. Smith to  
23 conduct the balance of the hearing.

24 Mr. Smith.

25 MR. SMITH: Thank you, Chairman Nelson. First

1 we'll take appearance of the parties beginning with  
2 Plaintiff, Oak Tree.

3 MR. UDA: Thank you, Mr. Smith. Mike Uda  
4 appearing as counsel for Oak Tree Energy.

5 MS. LAFRENTZ: Yvette LaFrentz, counsel for  
6 Oak Tree as well.

7 MR. SMITH: NorthWestern.

8 MR. BROGAN: Al Brogan for NorthWestern Energy.

9 MR. OLSON: Tim Olson for NorthWestern Energy.

10 MS. CREMER: Karen Cremer with Staff.

11 MR. SMITH: Next I think I'll just give a brief  
12 explanation of what I see the order of hearing. We had a  
13 little bit of confusion over that last time so I'm going  
14 to go through it right now. And we follow the same  
15 procedure that's used in the court system here.

16 And the order of hearing that I'm going to  
17 propose is, first of all, we'll have the case in chief  
18 from Oak Tree. Followed by NorthWestern's case.  
19 Followed by Staff. Then with NorthWestern's rebuttal  
20 case. And with Oak Tree as the Complainant, the  
21 Plaintiff in the action, having the final rebuttal.

22 And we'll take that as it goes. We have had  
23 hearings in the past where we've had subsequent rounds  
24 where we feel it necessary, but hopefully that won't be  
25 the case here.

1           Comment, Mr. Brogan.

2           MR. BROGAN: One question, Mr. Smith. As I  
3 recall, at the initial hearing where we had witnesses  
4 that had filed both direct and rebuttal testimony, we  
5 presented that when they were initially called.

6           Is that the intent again?

7           MR. SMITH: Yes. Because our belief is we've  
8 already seen that. It's not part of the official hearing  
9 record yet but we've already reviewed it and there's no  
10 reason to pretend we haven't read it so we'll just do --

11          Mr. Uda.

12          MR. UDA: Mr. Smith, are we following the same  
13 procedure we followed last time with the witnesses;  
14 they're supposed to summarize their testimony before  
15 they're subject to cross?

16          MR. SMITH: That's our usual procedure, yes.  
17 Begin with a summary, fairly brief summary, because we've  
18 read it. But a brief summary to sort of set it up so  
19 we're not upsidedown. Otherwise, we begin with  
20 cross-examination effectively.

21          So, yes, we would like to do that. And if  
22 counsel needs to assist somewhat in that summary, that's  
23 fine. We'd like to start out with the direct testimony.  
24 Okay?

25          Okay. With that, I'm going to ask the parties

1 up front if we have any stipulations or other issues  
2 right now, other things that we can resolve with respect  
3 to admissibility of the parties' exhibits. Particular I  
4 guess I'm referring to those that have already --  
5 probable exhibits that constitute the items that have  
6 already been filed in the case.

7 Anything that's out there?

8 MR. UDA: The only issue is we got some exhibits  
9 from Mr. Rounds, PUC Staff, yesterday afternoon, and  
10 we've been working through them. I don't anticipate that  
11 we will have any objections to those exhibits, but it may  
12 be necessary to voir dire Mr. Rounds about those so that  
13 we understand the implications of changes to his  
14 testimony.

15 MR. SMITH: Okay.

16 Mr. Brogan?

17 MR. BROGAN: NorthWestern has no issues.

18 MR. SMITH: Staff.

19 MS. CREMER: Well, I have no issues with my  
20 exhibits, but is that what you were asking?

21 MR. SMITH: No. No. That's not what I'm  
22 asking. I'm asking if we could -- if parties are going  
23 to object to admission to the exhibits that you know of  
24 at this point in time. And if not --

25 MS. CREMER: I don't believe so. We believe in



1 the open file policy so I doubt it.

2 MR. SMITH: Okay. With that then, I am going to  
3 request that the exhibits that -- and I'm assuming what  
4 we're talking about are those things, those testimonial  
5 exhibits, that have already been filed.

6 Is that true, Mr. Uda? Is that what you have?

7 MR. UDA: I believe that --

8 MR. SMITH: At least with respect to those.

9 MR. UDA: There's just four of them that were  
10 filed, I think, yesterday afternoon.

11 MR. SMITH: And that's the Staff exhibits.

12 MR. UDA: Yes. This is the exhibits that  
13 accompany Mr. Rounds' testimony.

14 MR. SMITH: Okay. Except for those late filed  
15 Staff exhibits yesterday --

16 MS. CREMER: Mr. Smith, if I might, they were  
17 not filed.

18 MR. SMITH: I know I haven't seen them.

19 MS. CREMER: Right. We did not get agreement  
20 from Oak Tree to file those. So, no, the Commission has  
21 not seen those.

22 I did serve them on the parties so they would  
23 have time to review them so we would not have to take a  
24 break during the hearing. But we did not reach a  
25 consensus on putting those on the website so you have not

1 seen them.

2 MR. SMITH: Okay. I didn't think I had. Except  
3 for those exhibits -- and that's four exhibits, the final  
4 four exhibits of Staff?

5 MR. UDA: Right. With the proviso, Mr. Smith,  
6 that it may very well be that after talking with  
7 Mr. Rounds we don't have any problem with it.

8 At this point it wasn't clear how this changed  
9 his testimony because there were no changes to the filed  
10 testimony. There were just these additional exhibits.

11 MR. SMITH: Okay. Well, that's fair enough.  
12 Except for those unfiled Staff exhibits, I'm hearing the  
13 parties agreeing that they have no objections to the  
14 admission. Not meaning you don't have issues with the  
15 substance but at least to the admission into the record  
16 of all of the other exhibits of all parties.

17 Is that correct, Mr. Uda?

18 MR. UDA: That would be my understanding, Mr.  
19 Smith.

20 MR. SMITH: Mr. Brogan?

21 MR. BROGAN: Yes. That's correct.

22 MR. SMITH: Staff.

23 MS. CREMER: That's correct. Thank you.

24 MR. SMITH: Okay. I don't have all the numbers  
25 and I'm not going to read them all off here but we'll

1 take those as they come. And all of the exhibits that  
2 you have, other than the four mentioned by Mr. Uda, the  
3 late filed Staff exhibits are admitted into the record.

4 Okay. With that, I think we'll turn to opening  
5 statements. And, again, we've been through this a lot,  
6 and so I think we prefer to keep the opening statements  
7 more like the Circuit Court does them this time and  
8 pretty much keep them to just summarizing the actual  
9 evidence that you intend to introduce without legal  
10 argument or anything like that. And we'd like to keep  
11 them brief and hopefully keep them within the 10- to  
12 15-minute type of time frame.

13 And if we begin to exceed that by much, I'm  
14 probably going to butt in and suggest that we move along  
15 and get them wrapped up. Okay?

16 With that, Mr. Uda, if you want to make an  
17 opening statement, please proceed.

18 MR. UDA: Thank you, Mr. Smith. With the  
19 understanding I'm not supposed to make legal argument, I  
20 did want to briefly put this case in context because I  
21 think there's guidance out there to the Commission on  
22 these issues.

23 There have been -- and I don't know how closely  
24 the Commission's been following these, but there's been  
25 recently a significant number of FERC decisions dealing

1 with PURPA. And collectively these decisions are, I  
2 think, putting together something we really haven't had  
3 prior to this point in PURPA's history, and that is sort  
4 of guidance to State Commissions about what they may and  
5 may not do with respect to the implementation of PURPA.

6 As you know, FERC oversees each state's  
7 implication of PURPA, and it has made clear that State  
8 Commissions may not base avoided costs on unreasonable  
9 assumptions, which result in rates that are different  
10 than those which QFs are otherwise entitled to under a  
11 proper calculation of avoided cost.

12 We believe that there are a number of  
13 unreasonable assumptions that are being made in  
14 NorthWestern's recent additional responsive testimony in  
15 this proceeding. What we hope to establish during this  
16 hearing is that between January of 2012 and November 21  
17 of 2012 NorthWestern continued to use the hybrid  
18 methodology, but it significantly changed the inputs.

19 The net effect of these changes, we believe the  
20 evidence will show, is that they have significantly  
21 reduced the number of hours they're in the market. This  
22 has an effect of depressing the avoided cost, we believe,  
23 in an inappropriate way.

24 The second issue that we would like to discuss  
25 at this hearing has to do with the way in which

1 NorthWestern prepared its electric price forecast.

2 Now as you probably know, if you take the  
3 electric price forecast and you plug it into the model,  
4 that is a portion of the avoided cost rate. That is one  
5 of the main factors in calculating the avoided cost  
6 rate.

7 And there are a number of professional  
8 forecasting organizations that do this for a living. And  
9 we've heard testimony in the past here about the relative  
10 reliability of those forecasting organizations.

11 Again, in this proceeding, between January of  
12 2012 and November 21 of 2012 NorthWestern changed the way  
13 it did its market forecast. We believe the testimony  
14 will show that essentially what NorthWestern did is they  
15 went to a publication called Argus and they selected a  
16 point in Northern Illinois and Chicago essentially in the  
17 Commonwealth Edison service territory and they used a  
18 number for 2012, 2013, 2014, and through 2015 but the  
19 Argus forecast doesn't go out for 20 years. So they had  
20 to figure out a way to extend that forecast going  
21 forward.

22 We think the evidence will show that what  
23 happened was they then went to develop a market heat  
24 rate. And you can develop a market heat rate by  
25 essentially taking the electric price in a forecast and

1 then taking the gas price and developing what that market  
2 heat rate is and then you can use that to calculate a  
3 long-term electric rate based on the assumptions in  
4 there.

5 We believe the evidence will show that what  
6 NorthWestern did was inappropriately mix a gas price  
7 forecast from the Intercontinental Exchange with the  
8 Argus electric price forecast. There were any number of  
9 other alternatives available to NorthWestern, but they  
10 chose to use this particular method.

11 We believe that that method was significantly  
12 flawed because it produces an artificially low electric  
13 price forecast. We think the best evidence of this is  
14 that the heat rates that NorthWestern Witness Lewis  
15 developed in his testimony demonstrates that over the  
16 next 20 years in the low load hours there will be no  
17 combined cycle combustion turbines who are operating  
18 because they would be selling at a loss.

19 The most efficient combined cycle combustion  
20 turbines operate between about 6,800 and 7,000. That's  
21 the heat rate for those units.

22 If the market -- if the gas price, for example,  
23 is \$5, you're ending up with a \$35 per megawatt hour rate  
24 for the electricity. And in those circumstances, if you  
25 have a situation where they can't operate those units

1 without selling at a loss, they're not going to operate  
2 them.

3 Now in this region the fleet of potential gas  
4 generators do not have an individual 7,000 heat rate.  
5 There are a lot of peakers, and those have heat rates in  
6 the 10 to 11,000 range.

7 We believe the testimony will firmly establish  
8 that that is an unreasonable market heat rate. And in  
9 the high load hours when Mr. Lewis's forecast is at its  
10 highest, many of those same units will never operate.

11 Now we believe and we came into this proceeding  
12 that -- well, there was an argument on both sides that  
13 gas was the resource that was at the margin, in other  
14 words, the margin of operating or not operating.

15 But under this scenario what you're really  
16 talking about is relying on coal. And if that were the  
17 case, I don't think anyone would be coming before this  
18 Commission and asking to site another peaker because it's  
19 not needed under this scenario.

20 Now I'll note that Staff witness, Brian Rounds,  
21 did not do what NorthWestern did. He didn't go out and  
22 develop a market heat rate. We think what he did was  
23 what essentially anybody else would do is he went out and  
24 found an electric price forecast and plugged it into the  
25 hybrid model. We think that was a more appropriate

1 approach than developing a 20-year avoided cost forecast  
2 using electric price forecast that only goes out three  
3 years and then developing a market heat rate from two  
4 different sources.

5 We think the testimony will also establish with  
6 respect to the market heat rate that when you use a gas  
7 price forecast from one source and electric price  
8 forecast from another source you run the danger of mixing  
9 apples and oranges. Because, typically speaking, any  
10 electric price forecast is going to have assumed within  
11 it a natural gas price forecast because natural gas, of  
12 course, is one of the main drivers in figuring out what  
13 your electric price forecast is going to be.

14 Why would you mix and match? We believe that  
15 the evidence will show the reason this was done was to  
16 produce an artificially low avoided cost.

17 Now we also think there's another significant  
18 issue with Mr. Lewis's electric price forecast and the  
19 way he did the market heat rate because as near as we can  
20 tell, and this is what we believe the testimony and  
21 evidence will establish, he didn't even use Argus. He  
22 used Argus minus \$5 to start his analysis.

23 Now we don't know why he did that. We hope to  
24 find out during the hearing. But obviously a \$5  
25 difference at the beginning of a 20-year forecast can



1 make a substantial difference.

2 Now on the coal side of the equation -- we just  
3 talked about the electric side of the equation and the  
4 hybrid methodology. We also have the coal side of the  
5 equation.

6 And in this proceeding the testimony from  
7 NorthWestern is that the variable cost of operating its  
8 coal plants is roughly \$18 a megawatt hour. We have  
9 noted that the co-owners of the Big Stone plant in doing  
10 their analysis for determining what the cost of replacing  
11 Big Stone will be have determined that the variable cost  
12 of operating Big Stone is \$40 a megawatt hour in 2016  
13 dollars.

14 I think that's a significant difference and it  
15 has a substantial impact on the development of a proper  
16 avoided cost calculation. We believe this to be another  
17 unreasonable assumption.

18 I want to talk about the capacity cost issue  
19 because this is another issue that we have to deal with  
20 in this hearing. The last time we had a hearing here you  
21 heard testimony that NorthWestern went to its board in  
22 April of 2011 and said we're at transmission constraint  
23 for capacity. We're having problems getting Mid-America  
24 to provide us with capacity. We can't really get it in  
25 the market, and we need to build a new gas peaker at the

1 Aberdeen facility.

2 And the board approved that. And this  
3 proceeding now in December of 2012, we have testimony  
4 from NorthWestern that their capacity costs -- and I  
5 don't want to get into the number. Their capacity costs  
6 are significantly less than it would be for the Aberdeen  
7 plant.

8 Mr. Lauckhart is going to provide testimony that  
9 that Aberdeen cost should be the cost in the capacity  
10 calculation. What NorthWestern has offered is a single  
11 tentative offer from a low level official from Basin  
12 Electric in October of 2010. And essentially the  
13 conversation went like this: Hey, we'd like to have some  
14 capacity from you guys from 2013 to 2015. And Basin  
15 finally came back and said, well, hey, we can do it at  
16 this price for 2013 and 2014. Not 2015.

17 They certainly didn't say it's going to be  
18 available for the next 20 years. But they said we got to  
19 run it up management. If you guys are really interested,  
20 let us know.

21 Five months later NorthWestern is in front of  
22 its board saying we can't get capacity at any price. We  
23 need to build the Aberdeen plant. Again, it's an  
24 unreasonable assumption. It doesn't meet reality.  
25 That's not in reality what happened, and it's not in

1 reality what NorthWestern's capacity costs are.

2 And as much as I regret to say it, we have an  
3 issue with Mr. Rounds because we believe his capacity  
4 cost is even more unreasonable than NorthWestern's.  
5 Mr. Rounds' testimony on November 21 said, well, I think  
6 what Mr. Lauckhart testified to at the hearing in March  
7 of this year, \$17 a kilowatt year, is reasonable.

8 And during our discovery conference we asked him  
9 if he was aware that Black & Veatch escalated that  
10 capacity forecast because it was based on an assumption  
11 of constrained capacity for this region for a period of  
12 time, but the assumption was that constriction of  
13 capacity was going to alleviate over time and that Black  
14 & Veatch actually escalated it to \$100 kilowatt year by  
15 2020.

16 Mr. Rounds did not seem familiar with that. And  
17 in his late filed exhibit, which I'll be asking him  
18 about, he has now escalated the \$20 a kilowatt year  
19 figure but he's escalated only to \$35, which we think is  
20 far, far too low. We do not think that is a reasonable  
21 assumption.

22 And, as you know, the capacity payment has two  
23 components. One is how much does it cost and then how  
24 much credit are we going to give you towards meeting the  
25 utility's peak needs? The proposal from both Staff and

1 NorthWestern in this case is to use the MISO average for  
2 the entire MISO region.

3           If you read the MISO study that came up with the  
4 12.9 percent average for all 129 wind projects in the  
5 MISO region, the projects range variously from a  
6 2 percent contribution to roughly 32 percent. So there's  
7 a huge difference between these plants.

8           Now we will be arguing, and our position is,  
9 that it's no more reasonable to assign an average  
10 capacity to a brand new facility with brand new turbines  
11 than it would be to overpay an inefficient generator with  
12 older technology to take that 2 percent number and say,  
13 okay, we're going to pay you 12 percent because that's  
14 the average.

15           That's not how MISO does it. MISO evaluates  
16 each facility and makes a determination of its capacity  
17 contribution. That's what the MISO study represents.  
18 Additionally, within the MISO region the area that  
19 NorthWestern operates within has a 15 percent average.  
20 And we know based on testimony that we've seen, and this  
21 is what will come out at the hearing, is for the first  
22 two years of the Titan operation it was 20 percent and  
23 30 percent.

24           Oak Tree is going to be roughly in the same wind  
25 regime as Titan with newer technology. To assume that it

1 will only achieve a 12.9 percent contribution to  
2 NorthWestern's peak needs is an unreasonable assumption.  
3 And, in fact, Mr. Lauckhart's 20 percent recommendation  
4 based on the Midwest Reliability Organization study that  
5 recommends using a 20 percent number is reasonable under  
6 those circumstances.

7 I want to skip directly to the issue of the  
8 separate capacity payment. NorthWestern's proposal in  
9 this case is to have a separate energy rate and then have  
10 a separate capacity payment.

11 We don't agree with how they're doing it, and we  
12 don't agree that it should be done. What they're  
13 proposing is in the first year we get the MISO average,  
14 12.9 percent, and then for the next five years they're  
15 going to average our actual output with the MISO average.  
16 That's not how Titan was done, and it's not consistent  
17 with your Order.

18 How it should be done is it should be forecast.  
19 And we believe that we have an entitlement to a fixed  
20 rate for the life of our contract. And I will read  
21 directly from FERC Order 69. This was back in 1981.  
22 "The Commission agreed with commenters in the Order  
23 Rule 69 rule making proceeding that 'stressed the need  
24 for certainty with regard to return on investment and new  
25 technologies' and permitted forecast avoided cost pricing

1 set at the time the obligation is entered into because it  
2 enables the QF 'to establish a fixed contract price for  
3 its energy and capacity at the outset of its  
4 obligation.'"

5 This is our choice. This is not something they  
6 can take away from us. Now we might not like the  
7 capacity charge that we eventually get, but it's our  
8 choice to decide how to calculate it that way. And we  
9 think Mr. Lauckhart has done a good job of that, and we  
10 believe his testimony establishes that.

11 And I apologize if I've been going on too long,  
12 but I will get to the bottom line here. This Commission  
13 and all state commissions perform a very important  
14 function under PURPA. We've heard from NorthWestern  
15 consistently that they are concerned about protecting  
16 rate payer interests with respect to qualifying  
17 facilities. And I think that's a valid concern.

18 It's equally a concern, however, when it comes  
19 to making a determination about the utility's own  
20 investment in its resources. And in this proceeding  
21 we've heard that NorthWestern's long-term calculation of  
22 avoided cost is roughly 38 -- 37, \$38 a megawatt hour for  
23 20 years. And in the Big Stone proceeding the co-owners  
24 in that proceeding have said that the cheapest  
25 alternative to the Big Stone project is \$74 a megawatt

1 hour over the life of that project.

2 If they truly believe that market purchases and  
3 their avoided cost is \$38, why are they telling you that?  
4 Our point is only that we're entitled to equal treatment.  
5 Your role in this proceeding is much like an umpire at a  
6 baseball game.

7 The only time people really get upset with the  
8 umpire is if the errors only go in one direction. If  
9 your pitcher isn't getting the call on the outside corner  
10 and the other guy's is, that's when the manager gets  
11 upset. That's when the fans get upset.

12 If it's innocent error, the errors will  
13 naturally occur on both sides of the equation. What we  
14 have here is a compound of errors all heading in one  
15 direction on the part of NorthWestern.

16 It's important for this Commission to ensure for  
17 rate payer interests neutrality between the utility's  
18 investment decisions and its avoided cost. The avoided  
19 cost process disciplines the utility and provides you  
20 with a tool to look at them and say really? You really  
21 need this stuff? It's not what you're saying over here.

22 And it's important for you to recall that when  
23 people say things in different context it depends on the  
24 audience that they say it to. And sometimes people say  
25 things for particular reasons to achieve a certain

1 objective. That doesn't make those statements  
2 reasonable. And in this particular case, for whatever  
3 reason, NorthWestern is saying two different things in  
4 two different proceedings.

5           There is an alternative to Big Stone. According  
6 to NorthWestern, they could go to the market and they  
7 could buy electricity and they could use Oak Tree to  
8 replace that. Oak Tree wouldn't be a complete  
9 replacement, but it could be part of the solution to that  
10 problem.

11           And I don't know if you've looked at those  
12 figures, but there is a considerable amount of money  
13 that is going to have to be spent to make that facility  
14 meet existing regulations by 2016. Those are just the  
15 facts.

16           In closing, the most important decision you can  
17 make is in asking yourself are the errors that are being  
18 made here errors in a reasonable direction? Are they  
19 things that you can look at and say, okay, well, if they  
20 made a mistake, was it a mistake that was made because  
21 it's the kind of mistake reasonable people could make or  
22 is it a mistake that leads in a particular direction?

23           All of the adjustments, starting with changing  
24 the number of hours that they're on the market to  
25 changing their electric price forecast, to using a very



1 low capacity cost number and calculating avoided cost,  
2 and using an average of the MISO region to set capacity  
3 contribution, all of these errors head in the same  
4 direction. They all push the avoided cost down.

5 What Mr. Lauckhart did was he said, okay, I'm  
6 going to take seven cases from the 2011 EIA early  
7 release. I'm going to average those along with Spion Kop  
8 in Montana, Big Stone, and Aberdeen. And he averaged all  
9 of them. He said, okay, here's the range. I'm just  
10 going to average them.

11 And we believe for example with respect to  
12 Mr. Rounds' forecast, which we think is much more  
13 reasonable than NorthWestern's, if certain errors were  
14 corrected in that, that number would be pretty similar to  
15 what Mr. Lauckhart came up with for the average.  
16 Although we think a bit lower. But, in any case, the  
17 question to ask is are the assumptions we're making  
18 reasonable?

19 Thank you.

20 MR. SMITH: Mr. Brogan, would you like to make  
21 an opening statement at the outset or wait until your  
22 case begins?

23 MR. BROGAN: Mr. Smith, because my opening  
24 statement will be considerably shorter, I hope, I will go  
25 ahead and make it now.

1           Good morning, Commissioners. It's good to see  
2 you again. I've lost track of the number of times I've  
3 come to Pierre on this matter. I do know this is our  
4 second evidentiary hearing. And I won't repeat most of  
5 the things that I said in my opening statement or were  
6 said earlier, except that I do want to remind, and I  
7 appreciate counsel for Oak Tree bringing this up, that  
8 NorthWestern really has no skin in this game.

9           We don't make money. We don't lose money based  
10 on how you set the avoided cost. Because it's a pass  
11 through. NorthWestern is here not representing its own  
12 interest but representing the interests of our  
13 customers.

14           In this docket the contested issues are fairly  
15 straightforward. We've obfuscated them. We've got  
16 massive amounts of data that maybe is incomprehensible.  
17 But when we get right down to it, we're talking about the  
18 price of energy, the price of capacity, and the amount of  
19 capacity.

20           But what we have to keep in mind is that what  
21 we're looking for is the specific NorthWestern Energy  
22 avoided cost. Not some generic utility's avoidable cost.  
23 We have to tie this back to NorthWestern.

24           While I may disagree with counsel for Oak Tree  
25 with respect to what the recent FERC orders imply, I will

1 not address them in my opening statement. I'll reserve  
2 that for when we actually have legal argument.

3 And as the witnesses will summarize their  
4 testimony, I will not. But I do want to comment on three  
5 things, I think, that Mr. Uda said that are important.

6 First, Mr. Uda quoted from Order 69 and talking  
7 about Oak Tree's rate for a fixed contract price.  
8 NorthWestern has not suggested that we should not set the  
9 price in this docket for capacity. Nor has it suggested  
10 we should not set the price for energy. But just as  
11 NorthWestern will pay for the actual energy produced by  
12 Oak Tree, it suggests that it should pay for the actual  
13 capacity provided by Oak Tree.

14 And when we start out with we have no history,  
15 we have no way of knowing what that capacity is and,  
16 therefore, we've proposed not to set a capacity amount  
17 that is -- not an amount. A price that's fixed. Not  
18 necessarily levelized but fixed, and pay Oak Tree for the  
19 amount of capacity that they actually provide and adjust  
20 it each year.

21 Mr. Uda made a considerable statement with  
22 respect to the utility's own investment and avoided cost.  
23 It's important -- and he used a baseball analogy. I  
24 won't go into the baseball analogy, but I will talk about  
25 comparing bananas and tomatoes. Because that's

1 essentially what we're doing.

2           When we start talking about trying to compare  
3 variable capacity, variable energy resources such as a  
4 wind farm with something such as a gas peaker plant that  
5 provides far firmer capacity it's like talking about  
6 bananas at 69 cents a pound and tomatoes at 2.99 a pound.  
7 You don't want to pay 2.99 for the bananas. And that's  
8 important here.

9           And, finally, I'm somewhat offended by the  
10 statement that NorthWestern is saying different things in  
11 different proceedings and then referencing Big Stone.  
12 NorthWestern is not, does not have yet a Big Stone  
13 proceeding. NorthWestern has not offered any testimony  
14 about Big Stone, and we have not said different things in  
15 different proceedings.

16           Commissioners, I think the testimony will  
17 establish that NorthWestern's avoided cost is properly  
18 calculated and estimated. True avoided cost is properly  
19 calculated and estimated by the model as presented.

20           I look forward to a good and contested hearing.  
21 Thank you.

22           MR. SMITH: Staff, opening statement at this  
23 time?

24           MS. CREMER: Thank you. No. Staff will reserve  
25 its right for opening statements before it puts on its

1 witness.

2 MR. SMITH: Okay. Thank you. Mr. Uda, are you  
3 ready to proceed then with your case and call your first  
4 witness, or do you need a minute?

5 MR. UDA: No, Mr. Smith. We're ready. I would  
6 call J. Richard Lauckhart to the stand.

7 (The witness is sworn by the court reporter.)

8 DIRECT EXAMINATION

9 BY MR. UDA:

10 Q. Mr. Lauckhart, would you please state your full name  
11 and business address for the record.

12 A. My name is J. Richard Lauckhart, L-A-U-C-K-H-A-R-T.  
13 I'm a private consultant working out of my home in  
14 Davis, California, 44475 Clubhouse Drive, El Macero,  
15 California 95618.

16 Q. And on whose behalf are you submitting testimony in  
17 this proceeding?

18 A. Oak Tree Energy.

19 Q. Okay. And did you cause on November 21, 2012, to be  
20 submitted in this proceeding additional issues  
21 testimony?

22 A. Yes, I did.

23 Q. And did you -- I believe it's on November 29 cause  
24 responsive additional testimony to be filed in this  
25 proceeding?

1 A. I believe it was November 28, but, yes, I did.

2 Q. Thank you. So I believe that your testimony is Oak  
3 Tree 9 and Oak Tree 10. Have you had a chance to review  
4 that testimony?

5 A. Yes.

6 Q. And have you -- do you have a full set of your  
7 copies and exhibits with you here today?

8 A. I have everything except my first exhibit to the  
9 November 28. I have partials of that with me here.

10 Q. Okay. Do you have the complete copy here with you?

11 A. There's one in the room.

12 Q. Okay. And if I were to ask you the same questions  
13 today, would your answers be the same?

14 A. Yes, they would.

15 Q. Do you have any additions or corrections to make to  
16 your testimony?

17 A. No, I don't.

18 MR. UDA: At this time I would -- I guess we've  
19 already moved the admission of Oak Tree 9 and 10?

20 MR. SMITH: We have.

21 MR. UDA: At this point I would ask the witness  
22 to summarize his testimony prior to cross-examination.

23 MR. SMITH: Please proceed.

24 A. Okay. On November 21 I filed what we call  
25 additional testimony, as you requested, dealing with

1 issues that were set forth. I pointed out that while in  
2 the early part of this case I used the Black & Veatch  
3 complicated set integrated models to avoided cost, that  
4 given where we are in this proceeding, it wasn't really  
5 possible to go through a process and rerun all of those  
6 complicated models, debate the inputs that go into those.

7 So I pointed out that what I really needed to do was  
8 go back and see what other people have forecast, people  
9 other than Black & Veatch, have forecast at that time.

10 And there are several, several various forecasts you  
11 could choose from. Some of them go directly to the  
12 avoided cost of energy. You don't have to get a gas  
13 price. We don't need a gas price in the contract with  
14 Oak Tree. We need an electricity price.

15 And some of those forecasts that I found at that  
16 time period actually gave an electric price forecast. So  
17 I pointed out what those were. I think there were three  
18 of those. And then I said another way to approach it is  
19 to get the electric price to go into avoided cost by  
20 starting with a gas price forecast -- because we all  
21 believe gas is an important element of electric prices --  
22 and then use some market heat rate data to create the  
23 electric price forecast.

24 And then, of course, I was directed to use the  
25 hybrid methodology, and I used the hybrid methodology as

1 NorthWestern had proposed it earlier this year.

2 And out of that process I created 10 different  
3 possible avoided cost forecasts that somebody could use.  
4 And we all know a 20-year forecast is not an exact  
5 science. But I felt this was a range, provided a range  
6 of these kind of forecasts that would be consistent with  
7 a February 25 time period.

8 And within that range I testified that I don't  
9 believe it makes sense to go to the bottom of that range  
10 and say that's the right number. If you're going to use  
11 the bottom of that range for the QFs, you need to use the  
12 bottom of that range when you evaluate the prudence of  
13 utility investments.

14 Most commissions will -- in this kind of an instance  
15 will look at the middle of the range and say there's  
16 uncertainty here. We don't want to pay too much, but on  
17 the other side we don't want to be too low. We will go  
18 with the middle of the range until next time around. And  
19 that's what I proposed to do is use the middle of that  
20 range.

21 I also pointed out that that range is all what we  
22 call brown power. All of those forecasts are based on  
23 nonrenewable resources. And, therefore, since Oak Tree  
24 is a renewable resource, it has what we call  
25 environmental attributes that are advantageous but to be



1 turned into what we call renewable energy credits, that  
2 you would need to add the renewable energy credits to  
3 that calculation if you want NorthWestern to have --  
4 count this towards their renewable goals.

5 And I think it's clear here that NorthWestern is  
6 about halfway towards the renewable goals in this state.  
7 This unit here, if it was added to the portfolio and they  
8 bought the credits, they would be at their goal.

9 They apparently aren't interested in meeting that  
10 goal because they've said they don't want to buy those  
11 credits. But I think it's up to you to help decide if  
12 they want to meet that goal.

13 So that was pretty much my testimony in the first go  
14 around. I did actually spend a little bit of time  
15 talking about capacity. And the things that Mr. Uda  
16 talked about, I won't repeat that here, but that was in  
17 my testimony. That Aberdeen really is the avoidable  
18 capacity resource at that time.

19 We all filed our testimony November 21, and we  
20 got -- we had a week, of course, to file our responsive  
21 testimony to that. We had previously agreed that we  
22 would have a telephonic sort of discovery process because  
23 there wasn't much time. So on Tuesday, the day before  
24 the responsive testimony was due, we had a conference  
25 call with all the parties. And it was very helpful to me

1 to better understand what some of the other parties had  
2 done.

3 I was really constrained in time to get that turned  
4 around to the responsive testimony on the next day, but I  
5 did the best I could. There will be a little bit more  
6 stuff coming in since that time that really wasn't in my  
7 written testimony because of the time frame, but I think  
8 it's going to be important.

9 I pointed out that, gee, NorthWestern in particular  
10 and to some extent Staff were not seeming to be  
11 approaching the QF avoided costs the way they approach  
12 other investment matters. I pointed out that, you know,  
13 the Aberdeen plant, they decided that, you know, that  
14 needed to be built because there weren't other  
15 alternatives and, therefore, that would be a prudent  
16 thing to do. And yet when it comes to us they say, well,  
17 there's stuff a lot cheaper than Aberdeen. Why would we  
18 use Aberdeen? That just seemed to be inconsistent to me.

19 Also in the Big Stone proceeding we hear that, well,  
20 proceeding while it's not scheduled, it's sort of moving  
21 along, people are getting ready to go with that. Nobody  
22 seems to be -- the Staff seems to be saying, well, in  
23 that process I'm going to bring in the same kind of  
24 analysis I did here.

25 Well, that's only for Oak Tree. That kind of

1 analysis isn't for that proceeding. And I'm trying to  
2 figure out why wouldn't it be? The alternative --

3 MS. CREMER: If I could just object, Staff  
4 didn't talk about Big Stone. You can't testify to things  
5 that were never presented. I object as to the relevancy  
6 of where he's going, and I'd like it stricken, anything  
7 about Big Stone.

8 MR. UDA: I believe Mr. Lauckhart did provide  
9 testimony on Big Stone. I don't believe he specifically  
10 identified Staff, but I think maybe what he was doing  
11 inadvertently was conflating the two.

12 MR. SMITH: I'll sustain the objection at least  
13 with respect to Staff.

14 A. Let me know if I shouldn't be saying this, but I  
15 will say this. We had a discovery conference call, and  
16 we asked Staff some questions about this. That's where I  
17 got my information about Staff. That's all I'll say.

18 So I pointed out that as I looked at what the  
19 parties had done there were things that could be adjusted  
20 in their analysis, which in my view would bring their  
21 stuff more consistent with how they're looking at these  
22 other projects. And I stepped through carefully each of  
23 those items of what needs to be done.

24 And when I pointed it out is, well, if you make  
25 those adjustments, their stuff falls in the range, the

1 same range I put in my testimony of November 21. Their  
2 stuff is in that range. And, therefore, based on the  
3 fact that they'd done one thing -- not a lot. They  
4 hadn't done several alternatives. They did a single.  
5 And I pointed, well, that single falls within the range.  
6 Clearly there were other things they could have done.

7 And for those reasons I felt that the range I  
8 provided and the average of that range continued to be  
9 a reasonable price to include in the Oak Tree  
10 contract.

11 That will complete my summary.

12 MR. SMITH: Mr. Uda, any clarifying questions  
13 you feel you need?

14 MR. UDA: No. I think that's acceptable,  
15 Mr. Smith. I would tender the witness for  
16 cross-examination.

17 MR. SMITH: Thank you. Mr. Brogan, are you set  
18 to go?

19 MR. BROGAN: Mr. Smith, I am. And I think I  
20 have very, very limited cross-examination.

21 MR. SMITH: Okay.

22 CROSS-EXAMINATION

23 BY MR. BROGAN:

24 Q. Mr. Lauckhart, in your -- I guess in Exhibit Oak  
25 Tree 9, on page 14 you state at line 24 through -- excuse

1 me. At line 27 through 28 "NorthWestern has indicated in  
2 other forums that the value of the REC is \$7.5 per  
3 megawatt hour"; is that correct?

4 A. Yes.

5 Q. To your knowledge, has NorthWestern indicated in any  
6 forum that the value of -- any value for RECs in  
7 South Dakota?

8 A. I don't know in front of this Commission I've seen  
9 them indicate. In fact, they've actually said it's zero  
10 value because they aren't required to meet an RPS I think  
11 is what they said.

12 MR. BROGAN: Mr. Chairman, I have no further  
13 questions.

14 MR. SMITH: Ms. Cremer, questions?

15 MS. CREMER: Yes, I do. Just one moment. I'm  
16 looking for it.

17 MR. SMITH: Do you want a little break?

18 MS. CREMER: Yeah. That would work. Thank you.

19 MR. SMITH: Why don't we take 5.

20 (A short recess is taken)

21 MR. BROGAN: Mr. Smith, I have a little bit of  
22 difficulty because I don't have that document in front of  
23 me since we're having some copies made. But this morning  
24 counsel for Oak Tree gave us an exhibit list, and we had  
25 Oak Tree 9 and 10 and then a whole bunch of other

1 exhibits listed on that.

2 And I was checking to make sure or would like to  
3 ask if it was just Oak Tree 9 and 10 that were admitted  
4 earlier today.

5 MR. SMITH: I understood what we did was just to  
6 admit those things that were prefiled. So I guess I'll  
7 ask Mr. Uda a question as to whether the other things on  
8 that list -- I just saw it a minute ago here so I have no  
9 idea what all is on there.

10 MR. UDA: My understanding with the potential  
11 correction of my co-counsel is that I don't believe that  
12 information has been filed. I think one of them might  
13 already be a preexisting exhibit, but I don't know if we  
14 added it again to the exhibit list.

15 No. So that would be the answer.

16 MR. SMITH: Okay. With that, I mean, the  
17 intent, I think, of the agreement to admit, the  
18 stipulation, was just those things that had been  
19 prefiled. So just to let you know that.

20 Okay. So all we've admitted at this point is  
21 Oak Tree 9 and 10. Okay?

22 MR. UDA: That's fine. I'm always happy to  
23 squabble and fight.

24 MR. SMITH: Well, we hadn't seen your list so I  
25 had no idea that there was -- I didn't know what we were

1 talking about, but my assumption was it was only those  
2 things that everybody's already seen. So okay. Thanks.

3 MR. UDA: Well, I guess I would just say, you  
4 know, given the compressed nature of this last few weeks.

5 MR. SMITH: Right.

6 MR. UDA: Trying to get everything prefiled was  
7 a challenge.

8 MR. SMITH: I understand. I totally appreciate  
9 that. I really do.

10 Staff, are you ready to proceed?

11 MS. CREMER: Thank you. I am.

12 CROSS-EXAMINATION

13 BY MS. CREMER:

14 Q. Good morning, Mr. Lauckhart.

15 A. Good morning.

16 Q. Those scenarios that you calculated using capital  
17 cost data, did they properly use the hybrid  
18 methodology?

19 A. I used the hybrid methodology as it was expressed in  
20 Exhibit B JL 3 in the early part of this docket. So I  
21 don't really know that I agree that's the proper  
22 methodology, but I used it because it had been presented  
23 before and I felt I could live with it for the purposes  
24 of this proceeding and my testimony on November 21.

25 Q. Thank you. And then did you review Mr. LaFave's

1 November 28, 2012, testimony?

2 A. Yes, I did.

3 Q. And it should be there in front of you. I  
4 understand it has not been admitted yet, but it's all  
5 marked.

6 A. I have a copy of it.

7 Q. You have a copy. Okay.

8 November 28, page 3, line 16.

9 MR. SMITH: I think it has been admitted, has it  
10 not? Yeah.

11 MS. CREMER: Oh, sure. It would have been.  
12 Yes. I'm sorry.

13 A. I see that.

14 Q. Okay. And in that line 16 you state -- Mr. LaFave  
15 states "First Mr. Lauckhart is double counting capacity  
16 in 7 of the 10 cases."

17 Would you explain what -- did you double count? I  
18 guess I'll ask that.

19 A. No, I did not.

20 Q. Okay. And can you explain, if you know, why he  
21 might believe that you did double count?

22 A. Well, I believe -- we should ask him, of course.

23 Q. Right.

24 A. But I believe he has proposed that there will be a  
25 separate capacity charge from the energy charge. I



1 folded my capacity value into the energy value. And I  
2 suggested there be one energy charge that includes --  
3 energy payment that includes both the capacity value and  
4 the energy value.

5 I'm not proposing to then in addition go out and get  
6 a capacity payment. So I'm thinking he's thinking I go  
7 out and do that too. It's the only way I think he can  
8 think I'm double counting, but I'm not.

9 MS. CREMER: All right. That's all I have.

10 MR. SMITH: We're going to turn now to  
11 Commissioner questions. And we'll begin now with  
12 Chairman Nelson.

13 CHAIRMAN NELSON: Thank you. Just a couple of  
14 questions.

15 This morning Mr. Uda indicated that he found  
16 that Brian Rounds' electric price forecast was "more  
17 appropriate."

18 Would you agree that Mr. Rounds' electric price  
19 forecast is in indeed appropriate?

20 THE WITNESS: Yes, I would.

21 CHAIRMAN NELSON: Second question. Also  
22 referring to the testimony of Bleau LaFave -- and this  
23 would have been in his November 21 testimony -- have you  
24 reviewed that?

25 THE WITNESS: Yes, I have.

1           CHAIRMAN NELSON: In that, on pages 5 and 6 he  
2 indicates that the appropriate rate to increase -- or the  
3 appropriate percentage to increase capacity per year is  
4 5.84 percent.

5           Would you concur with that as an appropriate  
6 inflationary number?

7           THE WITNESS: Could you point to me exactly  
8 where we're talking?

9           CHAIRMAN NELSON: Bottom of page 5, top of  
10 page 6.

11          THE WITNESS: Okay. I see what you're referring  
12 to now. So the question is would I agree that that's the  
13 appropriate rate?

14          CHAIRMAN NELSON: An appropriate inflationary  
15 rate. I'm not asking about anything other than the 5.84.

16          THE WITNESS: Well, I struggle with inflating a  
17 capacity charge if the avoided -- if the avoided capacity  
18 is, in fact, an investment. An investment, of course,  
19 really is a front loaded thing. You put it in rate base  
20 and it's higher in the first year and it declines as the  
21 rate base declines.

22          So really if you're using -- if you wanted to  
23 have a different number in every year and it's an  
24 investment, you might have a higher number the first year  
25 and have it trail down. Normally we, of course, don't do

1 that.

2 With an investment like this you would normally  
3 just levelize it. Say we'll just have -- you know, the  
4 investment is, you know, \$70 million. We'll assume a  
5 10 percent levelized fixed charges rate. So we'll assume  
6 \$7 million a year.

7 And so my testimony is the avoided capacity here  
8 is a new peaker. And a new peaker, I think, should be a  
9 constant price because that's how we do it on the utility  
10 side, levelized fixed charges rate.

11 So now somebody could say, well, you know, you  
12 could get an equivalent present value. Instead of making  
13 it flat, you could tilt it this way or tilt it that way.  
14 I would say why bother? Why don't you just leave it  
15 flat?

16 CHAIRMAN NELSON: And I understand your  
17 testimony and your position on the Aberdeen peaker.  
18 Let's use a situation where capacity was being purchased  
19 on the market.

20 THE WITNESS: Okay. And that's --

21 CHAIRMAN NELSON: Would 5.84 be an appropriate  
22 inflationary rate over 20 years?

23 THE WITNESS: The way I would answer that is in  
24 our Black & Veatch forecast we talked about nine months  
25 ago or whatever it was. In that forecast we actually --

1 Black & Veatch tried to look at the market. We were  
2 looking at in that case the Midwest fairly big footprint,  
3 but we were looking at that footprint and saying, gee, if  
4 there's going to be purchased -- somebody's going to buy  
5 and sell capacity, what price would it go for?

6 Well, we looked to see how scarce is the  
7 capacity in that market? And at that point we felt at  
8 least in the broader Midwest that there was kind of an  
9 oversupply of capacity. And so we started that number  
10 fairly low.

11 And then we said -- we fundamentally looked at  
12 how that supply was going to tighten -- how the supply  
13 was going to tighten and how fast that price would have  
14 to go up. Because at some point when you have to build  
15 new capacity to sell it to somebody you're going to  
16 charge them what it costs to build the capacity. So  
17 there's the rate I would have gotten.

18 What we learned since that, of course, at this  
19 proceeding is, well, maybe there was surplus in the  
20 broader Midwest, but NorthWestern didn't seem to have  
21 access to it, which is why they built the Aberdeen  
22 plant.

23 CHAIRMAN NELSON: Thank you. No further  
24 questions.

25 MR. SMITH: Other Commissioner questions?

1           Otherwise, Mr. Rislov, it looks like he has some  
2 questions.

3           COMMISSIONER HANSON: I have.

4           MR. SMITH: Do you want to go, Commissioner  
5 Hanson?

6           COMMISSIONER HANSON: Thank you, Mr. Smith. I  
7 was giving deference to Vice Chair.

8           Mr. Lauckhart, good morning.

9           THE WITNESS: Morning.

10          COMMISSIONER HANSON: I appreciate your  
11 testimony. I found it very instructive. I've enjoyed  
12 the information that you've provided, and I think that in  
13 some events it's convincing.

14          I'm curious on a few areas. One is the capacity  
15 factor and a floating rate. I'm wondering how you would  
16 implement that if we were to implement that.

17          THE WITNESS: Well, of course, it's a lot  
18 simpler if you just say we think here's the reasonable  
19 number, we're going to live with it; right?

20          When you decide that we're going to have a  
21 floating rate, now the question is, well, who's going to  
22 calculate it? It would be nice if NorthWestern was a  
23 member of MISO because MISO does the calculation for the  
24 capacity credit for every wind plant in its service  
25 territory, and it's got a very complicated process that's

1       been approved by FERC for doing that.

2               So if we had a floating rate and MISO was going  
3       to calculate it, I would say, okay, let's just have MISO  
4       calculate it and we'll live with that.

5               But in this instance, of course, NorthWestern  
6       isn't a part of MISO. So what NorthWestern is proposing  
7       is that they calculate it themselves. I'm just a little  
8       bit nervous about letting them calculate it. And I'm  
9       thinking, well, gee, if they're going to do a calculation  
10      we're not going to agree with, what is our remedy? I  
11      guess we file a Complaint with this Commission.

12              Well, that's fairly expensive for Oak Tree to  
13      have to come in here every year to have to file a  
14      Complaint with this Commission and go through a hearing  
15      process on whether they did that right.

16              So, you know, one possibility in my view is say,  
17      look, we think Oak Tree is a new technology. It's got  
18      good wind. Let's go pick one of the wind plants in MISO  
19      and figure out what node that is and whenever MISO does  
20      it every year we'll use that credit for that node. That  
21      would be one way to do it.

22              It would be simpler if you could just say and my  
23      recommendation is I think 20 percent is reasonable  
24      average to expect for this plant over the life of it.  
25      Why don't we just say 20 percent.

1           I mean, Titan got 20 percent the first year,  
2   33 percent the second year. You can't say that  
3   20 percent is unreasonable based on what we know about  
4   Titan.

5           COMMISSIONER HANSON: Of course, that's the  
6   reason I asked. There's variables, of course. And I  
7   hadn't thought of just picking another wind farm and  
8   using that one.

9           I anticipated that we would be sitting here  
10  every year trying to figure out what the -- you know,  
11  trying to be a referee on that. That's an interesting  
12  thought.

13          Do you see another wind farm that -- and I don't  
14  imagine that you've studied all of the wind farms around  
15  here, but you have -- do you think that would work with  
16  all the variables that would exist with choosing another  
17  wind farm?

18          THE WITNESS: You would be having to accept the  
19  fact that it's not going to be your wind farm. But I  
20  would say this: If you get one that has, first of all,  
21  the same technology -- you want to find one in MISO that  
22  has the same technology because technology is a big part  
23  of this.

24          Get one that has the same technology, see if you  
25  can find one that seems to have a similar wind regime,

1 and just use it.

2 COMMISSIONER HANSON: I don't think it's  
3 possible, but that's -- appreciate that as a way to be,  
4 to gear it.

5 Thank you very much. I don't need to ask the  
6 other questions that I had here, I see. But the nuts and  
7 bolts of being able to figure out the floating rate is  
8 what has concerned me here. So appreciate your answer.  
9 Thank you.

10 MR. SMITH: Commissioner Fiegen, do you have  
11 questions?

12 COMMISSIONER FIEGEN: Just a quick question on  
13 your 10 scenarios. Did any of them include carbon  
14 costs?

15 THE WITNESS: No. None of them included carbon  
16 costs.

17 COMMISSIONER FIEGEN: Thank you.

18 MR. SMITH: Mr. Rislov.

19 MR. RISLOV: Thank you.

20 Mr. Lauckhart, a bit ago Staff counsel  
21 referenced responsive testimony of NorthWestern witness  
22 LaFave. And I want to go to that same page, page 3 of  
23 LaFave responsive testimony in the exhibit. If it's  
24 helpful, I think the exhibit number is 16.

25 THE WITNESS: Page 3 of November 28?



1 MR. RISLOV: Pardon?

2 THE WITNESS: Page 3 of November 28?

3 MR. RISLOV: Yeah. I believe it would be the  
4 second round. That would be November 28.

5 MR. SMITH: Greg, can you pull that mic. in  
6 front of your mouth a little more if you would, please.

7 MR. RISLOV: Okay. Just let me know if it  
8 doesn't work, John.

9 MR. SMITH: Thank you.

10 MR. RISLOV: There's a chart on that page.

11 THE WITNESS: Yeah.

12 MR. RISLOV: That shows the monthly capacity  
13 factors. And I am curious why -- if you would agree with  
14 the way it's depicted, why Titan and MISO seem to be  
15 following in lockstep and yet the Oak Tree pro forma  
16 seems to vary more than a little bit.

17 Is there an answer to that?

18 THE WITNESS: Well, it is a little bit of a  
19 surprising observation. I'm not sure how this was  
20 created. Clearly with 129 wind plants in MISO there's  
21 going to be a huge variation in the pattern.

22 So we know this. I don't know -- I don't really  
23 know how this chart was put together. We know that the  
24 only pattern data they have from Oak Tree was met tower  
25 based information, which I think is pretty good.

1           Whether they're looking at the same year in this  
2 data -- maybe it's different years. You know, how this  
3 came about I really couldn't answer. But the fact that  
4 those two -- I'm talking about the Titan 2010, 2012, and  
5 the MISO 2010 to 2012 are such a close pattern just  
6 really surprises me.

7           MR. RISLOV: Thank you. If we could go to  
8 line 3. And there's a sentence starting "If Oak Tree  
9 desires."

10           Do you see that on the same page?

11           THE WITNESS: Yes.

12           MR. RISLOV: If you could read that entire  
13 sentence and give me your impression of how this  
14 addresses your testimony.

15           THE WITNESS: Sure. That sentence says, "If  
16 Oak Tree desires the hourly protections associated with  
17 this forecast output, Oak Tree can choose a price and  
18 schedule that includes summer/winter peak and off peak  
19 pricing instead of fixed annual price."

20           So I guess he's saying it's Oak Tree's decision.  
21 I haven't really talked to Oak Tree whether they desire  
22 that or not. I think it's a nice choice to give them.

23           MR. RISLOV: Did you make this recommendation in  
24 your testimony?

25           THE WITNESS: No, I did not. It's not -- it's

1 not normally how -- if you look at the Titan wind  
2 contract, they don't have that in theirs. They just have  
3 different -- you know, they have numbers. A price for  
4 one year, a price for the next year. They don't have  
5 seasonal prices, et cetera.

6 MR. RISLOV: Okay. Different subject. There's  
7 some disagreement regarding the maximum capacity rating  
8 potentially of Oak Tree after it's constructed. We have  
9 a number that both Staff and Oak Tree have used, and then  
10 we have a number that NorthWestern uses that's somewhat  
11 lower.

12 I would like to get a little bit of clarity from  
13 all the witnesses on what they believe that choice should  
14 be for that capacity.

15 THE WITNESS: Well, sure. The 19.5 is simply  
16 the name plate rating of the units that are going to be  
17 built. That's what 19.5 is. One and a half megawatt  
18 units and X amount 19.5. The 18.95 or whatever is sort  
19 of an estimate of the losses that will occur on the  
20 collection system. So 19.5 gets reduced to slightly  
21 below 19 because some of the estimated losses. So those  
22 are the two numbers that came from Oak Tree.

23 Now NorthWestern claims, well, you gave us met  
24 tower data that said based on wind here's your hourly  
25 production across your thing, and the biggest number we

1 ever saw was 17.

2 Well, met tower data is supposed to be taking  
3 all kinds of things into account, including, first of  
4 all, there's diversity even across a wind farm on wind.  
5 There is -- they take into account some expected forced  
6 outages that might be occurring on some of the plants,  
7 et cetera, et cetera, from time to time, just like you do  
8 on a coal plant expected forced outage rate.

9 So they take all that into account using the met  
10 tower data. Using met tower data to figure out the  
11 capacity unit is not a standard approach. I think you're  
12 talking about 19.5 or 18.95 if you want to use the --  
13 reduce for losses.

14 MR. RISLOV: I want to follow up a little bit  
15 now because I believe Commissioner Hanson had a question  
16 regarding what would I call a rolling capacity factor  
17 averaged over a period of years perhaps. I believe  
18 NorthWestern suggested a method. You, on the other hand  
19 have advocated 20 percent consistently throughout the  
20 life of the plant.

21 And my question is this: I read in your  
22 testimony that perhaps you expect that capacity factor to  
23 be above 20 percent based on what you've seen from Titan  
24 1 and perhaps from other MISO data; is that correct?

25 THE WITNESS: Well, let's just make sure we're

1 talking the same terms here. I consider capacity factor  
2 the average energy over the year divided by the name  
3 plate of the unit. That's kind of an energy base, how  
4 much energy do we get over the year.

5 The 20 percent is more how much credit do we  
6 give it for capacity? How much towards meeting our  
7 ability to meet our peak load. And so we call that -- I  
8 call that a capacity credit as opposed to a capacity  
9 factor. But, you know, as long as we're talking the same  
10 terms.

11 So on the capacity credit nobody's -- you know,  
12 if you have a coal plant, they'll pretty much say -- if  
13 you have a 100 megawatt coal plant, they'll say we're  
14 going to give it 100 megawatts because they think it's  
15 probably pretty reliable. It will probably be on during  
16 the peak. There's some chance it won't be; right? It  
17 might be forced outage.

18 Normally coal plant you would say we're going to  
19 count it 100 percent towards meeting our peak. For a  
20 wind plant nobody's counting wind 100 percent towards  
21 meeting peak. And the question is, well, how much should  
22 we count it?

23 And that gets to be a very, very complicated  
24 world. And that's I didn't insert as an exhibit in my  
25 November 28 testimony, well, MISO has been through this

1 since spades. You know, in this proceeding we're not  
2 going to possibly be able to research that subject matter  
3 nearly as much as MISO has. MISO has researched it, come  
4 up with a process for how you could do it, took it to  
5 FERC. FERC said that's okay. That's why I've suggested  
6 that we use the MISO methodology.

7 MR. RISLOV: And I heard your answer to  
8 Commissioner Hanson, but couldn't the parties or the  
9 Commission and the parties agree on a method, standard  
10 method, to be used for measuring that capacity credit on  
11 a year-to-year basis?

12 THE WITNESS: Well, the MISO parties tried to do  
13 that, right. Couldn't all the MISO parties agree on a  
14 method? Well, they came up with a method. I don't know  
15 if they all agreed upon it, but FERC finally said that's  
16 the method.

17 So are you saying could these parties, these  
18 three, go through a mini section of what MISO did in  
19 trying to agree and if we don't agree, we'll go to FERC  
20 and get them to say what it is? That's a possibility  
21 too. I just think it's overkill for the purposes of this  
22 one project.

23 We're talking about I'm going to say  
24 20 megawatts. Maybe it's only 19.5 or 18, but a 20  
25 megawatt project. And I'm saying, well, I think you

1 should count it at 20 percent. That's 4 megawatts. Do  
2 we need to kill this fly with a sledgehammer?

3 MR. RISLOV: I appreciate that answer. The fly  
4 with a sledgehammer makes things very clear.

5 That's all I have. Thank you.

6 MR. SMITH: Additional Commissioner questions?

7 I'm not seeing anybody gesturing so, Mr. Uda,  
8 are you ready to redirect?

9 MR. UDA: I will proceed. I only have, I think,  
10 one, possibly two, questions.

11 REDIRECT EXAMINATION

12 BY MR. UDA:

13 Q. Commissioner Nelson asked you about the energy  
14 forecast prepared by Mr. Rounds and asked you if you  
15 thought that that was reasonable, acceptable. I'm not  
16 exactly sure the term he used.

17 Do you agree with everything -- did that imply that  
18 you agreed with everything that Mr. Rounds did?

19 A. No. I thought the question went to his market price  
20 forecast.

21 Q. Okay. So your answer was necessarily limited to  
22 Mr. Rounds' market price forecast?

23 A. Yes, it was.

24 MR. UDA: Okay. Thank you.

25 MR. SMITH: Mr. Brogan, do you have any follow

1 on with respect to the Commissioner questions?

2 MR. BROGAN: Mr. Smith, I do have two that are  
3 with respect to Commissioner questions.

4 RECROSS-EXAMINATION

5 BY MR. BROGAN:

6 Q. Mr. Lauckhart, I think it's two -- in your rebuttal  
7 testimony you include an Attachment 2, which was a MISO  
8 planning year capacity credit analysis; is that correct?

9 A. Yes.

10 Q. Was that document available as of February 25, 2011?

11 A. It wasn't. But, as I say in my testimony, the  
12 reason I included it is because NorthWestern is proposing  
13 to change the capacity credit paid to Oak Tree every  
14 year.

15 And then so, well, the first year hasn't even  
16 happened yet so I think --

17 Q. Mr. Lauckhart, I just asked a simple question,  
18 please. I was just asking if it was available.

19 My second question about that document, could you  
20 tell me what a CP node is?

21 A. In a nodal market -- we're talking about nodal  
22 market. MISO provides a nodal market, locational market  
23 pricing, nodals. You know, what -- every substation, and  
24 we're talking about as low as maybe like 69 kV  
25 substations and up, every one of them is considered a



1 node. And every node has either got a load on it or it's  
2 got generation on it or some combination.

3 And so MISO actually calculates a new price for  
4 every node for every hour. You know, it's used for the  
5 purposes of charging for congestion. Sort of like prices  
6 for buying and selling powers for charging for  
7 congestions.

8 So in the purposes of the document we're talking  
9 about here they're saying, well, we have 129 of these  
10 nodes that have wind generation on them.

11 MR. BROGAN: No further questions.

12 MR. SMITH: Staff, do you have any follow-ons to  
13 Commissioner questions?

14 MS. CREMER: Staff does not. Thank you.

15 MR. SMITH: Mr. Uda, do you have any follow up  
16 to NorthWestern's cross-examination?

17 MR. UDA: Just one.

18 REDIRECT EXAMINATION

19 BY MR. UDA:

20 Q. Mr. Lauckhart, Mr. Brogan asked you about the  
21 availability of the MISO document that's attached to your  
22 testimony and asked you whether it was available as of  
23 February 25, 2011, and I think you were explaining why  
24 you included it.

25 Could you finish your explanation, please.

1 A. Yes. So NorthWestern has proposed changing the  
2 amount of capacity credit every single year going  
3 forward. And so while this wasn't available at that  
4 time, clearly it would be used under their theory even  
5 for the first year of the operations of Oak Tree's wind  
6 project.

7 And it was also interesting when you look at that  
8 document it actually takes those 129 different wind  
9 plants and says, well, you know, that's across the whole  
10 MISO footprint. But that document actually breaks out  
11 how much of those were in the region where Oak Tree is,  
12 how many of those were over in Chicago, how many of those  
13 are --

14 And I point out that, well, by then they've already  
15 said we're not going to -- you know, the average maybe  
16 for the whole 129 wind plants is this, but the ones over  
17 here where Oak Tree is, their average is better.

18 So at least we have some information that the  
19 average across all of MISO is lower than the average in  
20 the region where Oak Tree is located.

21 MR. UDA: No further questions.

22 MR. SMITH: Thank you. I think for now you may  
23 step down, Mr. Lauckhart.

24 MR. UDA: And at this time having called its  
25 witness, Oak Tree would rest its affirmative case.

1 MR. SMITH: Thank you. Mr. Brogan, do you need  
2 a little break before proceeding, or are you ready to  
3 forge ahead?

4 MR. BROGAN: Mr. Smith, in the interest of  
5 trying to go forward, I'm ready to forge ahead.

6 MR. SMITH: Okay. Thank you. Please proceed.

7 MR. BROGAN: NorthWestern calls Richard J.  
8 Green.

9 (The witness is sworn by the court reporter.)

10 DIRECT EXAMINATION

11 BY MR. BROGAN:

12 Q. Mr. Green, would you state your name and business  
13 address for the record.

14 A. My name is Richard Green. My business address is  
15 165 South Circle Drive in Huron, South Dakota.

16 Q. And by whom are you employed?

17 A. Actually I'm self-employed as an independent  
18 contractor providing consulting services for  
19 NorthWestern.

20 Q. Did you submit prefiled direct supplemental  
21 testimony in this docket on November 21?

22 A. Yes, I did.

23 Q. Before you is a document that has been admitted as  
24 NWE 10. Would you take a moment to review it and tell me  
25 when you've finished.

1 (Witness examines document)

2 A. Okay.

3 Q. Also before you is a document that has been admitted  
4 as NWE 11. Would you take a moment to review it and tell  
5 me when you've finished.

6 (Witness examines document)

7 A. Okay.

8 Q. Is NWE 10 a true and correct copy of your testimony  
9 from November 21?

10 A. Yes, it is.

11 Q. And is NWE 11 a true and correct copy of your  
12 testimony from November 28?

13 A. Yes, it is.

14 Q. If I were to ask you the same questions in those  
15 documents as are set forth here today under oath, would  
16 your answers be the same?

17 A. Yes.

18 Q. Mr. Green, would you summarize your testimony from  
19 November 21 and November 28, please.

20 A. Okay. Basically it consists of five components. In  
21 moving ahead with the hybrid model to this date we  
22 decided we had to have something that would accommodate  
23 some growth factors for NorthWestern's system load.

24 The first model did not have that. And so we  
25 incorporated a method where we could adjust the blend

1 rates between market purchases and generation going  
2 forward based on the fact we're going to have a fixed  
3 amount of base load generation and we're going to have  
4 continuing fairly steady moderate growth, we think, every  
5 year.

6 So we're going to have to get into the marketplace  
7 or some other alternative resource going forward. So the  
8 model is adjusted for that purpose, and that's most of  
9 what my discussion here has to do with. I provided some  
10 forecast of base load inavailability that indicates we're  
11 going to have a certain amount of generation available  
12 every year on average.

13 I looked at the load growth we experienced the last  
14 10 years or so, and I think there was a chart in here  
15 that shows some of that information. And it's been  
16 fairly steady. And I also discuss the variable  
17 generation cost experienced at the Big Stone plant which  
18 would be our avoidable cost if a resource came along and  
19 provided 10 megawatts of energy to replace the Big Stone  
20 plant.

21 And then, finally, I reviewed the capacity credit  
22 calculation that NorthWestern has used for Titan Wind  
23 Farm for the few years we've had the operation. And then  
24 I provided a recommendation for the Oak Tree wind farm  
25 should we get to that point.



1 capacity that Oak Tree should be credited with, whether  
2 it should be the 19 and a half megawatts nameplate rating  
3 or I presume 18.95?

4 Is that the source of your concern?

5 A. My concern is we don't have a installation on the  
6 ground yet. We don't really know what the output will  
7 be. There are a number of factors including losses which  
8 have been estimated in Oak Tree's filing. A number of  
9 factors. Wind conditions. We don't know from the met  
10 data for sure if we're going to produce the amount of  
11 energy or capacity that was presented in this case.

12 We believe that a performance based result is  
13 better, if we can get to one. And that's the way MISO  
14 does it. That's the way the energy's going to be  
15 created. We're going to be reading a kilowatt hour meter  
16 every month and determine how much energy is provided. I  
17 don't see anything wrong with the same feature for a  
18 capacity rating. Let's get to the actual number when it  
19 happens.

20 Our experience with Titan has been the first few  
21 weeks back in late 2009 early 2010 within a few weeks we  
22 knew the number. And the manufacturer actually tuned the  
23 controls on the blade control so that it didn't exceed  
24 the loading they expected or required on their equipment.  
25 And that's -- when we get to 25 megawatts that's pretty

1 much where it shuts off, whether the wind is 38 miles an  
2 hour or 58 miles an hour -- if it gets to 58 miles an  
3 hour, they shut the plant down completely. But we know  
4 that maximum dependable demonstrated capacity.

5 Q. Okay. So are you familiar with the kind of turbines  
6 that Oak Tree is going to be using?

7 A. No, I'm not. The only information I have is  
8 basically the met data.

9 Q. Okay. And do you know what the expected losses are?  
10 I assume -- I mean, I assume you don't because you don't  
11 know what generating technology they're using?

12 A. The only thing we got was what was filed with FERC  
13 regarding the QF application indicating about a half a  
14 megawatt of losses between the generator terminals -- I  
15 assume that's where they started -- and the point of  
16 interconnection with the utility.

17 Q. Okay. So if your concern is that you want to be  
18 accurate about this and base it on the actual output of  
19 the Oak Tree facility -- and I'm not mischaracterizing  
20 what you've said; right?

21 A. I think that's correct, yes.

22 Q. Okay. So why are you giving them the average  
23 12.9 percent that MISO calculated for 129 projects across  
24 the MISO region?

25 A. I don't believe so my testimony included



1 12.9 percent.

2 Q. Okay.

3 A. I think my testimony offered the method that would  
4 start -- we have to start somewhere. That would start  
5 with whichever year we're looking at. If it's the first  
6 year of commercial operation, we look at what MISO  
7 established for their footprint as a starting point.

8 Over the ensuing five years we would accumulate  
9 historical data on the Oak Tree facility and apply those  
10 numbers on an average basis with MISO slowly phasing out.  
11 Once we're five years we drop MISO out of the picture,  
12 and you're based on your own performance.

13 Q. But the first year you're using 12.9 percent, aren't  
14 you?

15 A. No. If the plant comes on in 2014, I don't know  
16 what that number is yet. I'm proposing whatever MISO is  
17 going to propose at that time.

18 Q. So, for example, this year I think you've testified  
19 it's 13.3 percent.

20 A. I don't know that that's in my testimony. But MISO  
21 has established the credit for the year 2013 based on the  
22 last eight years of historical performance at 13.3 for  
23 next year for planning purposes.

24 Q. Right.

25 A. 12.9 was, I think, this year 2012. 2014 we don't

1 know. If Oak Tree isn't on until 2014, there's no point  
2 in using 12.9 or 13.3. I would suggest we would use  
3 whatever MISO would establish as their planning capacity  
4 credit for the year 2014.

5 Q. What I'm trying to get to, Mr. Green, and maybe you  
6 misunderstood my question, but my question is if your  
7 concern is getting this right, why use an average that  
8 MISO is using for the entire region as opposed to using,  
9 for example, the actual output from Oak Tree or, for  
10 example, using the region within MISO that the Oak Tree  
11 project will be located?

12 A. We will be using the actual output from Oak Tree,  
13 eventually. We have to start somewhere. We have no data  
14 at the front end.

15 Q. Right. But there's regions within MISO; correct?

16 A. But that's not Oak Tree. There's no facility at the  
17 Oak Tree location.

18 Q. Right. But there's a location within MISO that's  
19 separately analyzed by MISO; correct?

20 A. Well, I just saw in the latest report that they  
21 divided the area up now into seven or eight zones.

22 Q. Right.

23 A. The zone that contains the Oak Tree site has a  
24 15.2 percent rating for this particular year.

25 Q. Right.

1 A. And but I don't know specifically the Oak Tree site.  
2 It varies from site to site. So I guess my argument is  
3 why not use performance-based historical data ultimately.  
4 Got to start somewhere, though.

5 Q. Right. But when you say "ultimately" what you're  
6 saying is --

7 A. Five years.

8 Q. -- for the first five years you're going to average  
9 it?

10 A. And each year the MISO will have less effect because  
11 you'll have one more year of historical data from Oak  
12 Tree.

13 Q. Well, maybe. Maybe Oak Tree comes out with 24  
14 percent over that five-year period and you're using  
15 12.9 percent. Wouldn't it affect it if that was the  
16 average over the time substantially?

17 A. It would be a weighted average. You'd have 24 for  
18 five years and MISO for one year essentially in terms of  
19 the weighted averaging.

20 Q. Okay. But let's just say, for example, that --  
21 strike that.

22 Let me ask you this. Do you know how that -- if  
23 that's how the capacity is calculated for Titan?

24 A. The first year that Titan was on line we had  
25 20 percent. I think you pointed that out. And that was

1 based on a MISO type of calculation. We took the eight  
2 highest peak loads on our system that summer, they all  
3 occurred during the summer, and then we looked at Titan's  
4 output for those same hours, those same eight periods of  
5 time.

6 And the 20 percent. They contributed 20 percent  
7 toward peak capacity -- or peak load, excuse me, that  
8 summer.

9 Q. But in that instance you didn't take the average of  
10 the entire MISO footprint for all the wind plants?

11 A. The Titan Wind Farm has -- there's no reason to do  
12 anything like that. We're not buying capacity from them.  
13 We just needed a number we could use for planning  
14 purposes the next year. I guess maybe further  
15 explanation.

16 The first month of the first year that Oak Tree  
17 would be on line I expect the capacity payments are going  
18 to be made up front, or are they going to be -- what was  
19 the proposal?

20 Is there going to be a monthly payment? We got to  
21 start somewhere, and we won't have any history the first  
22 month or the second month really to speak of until we get  
23 to those eight summer peaks.

24 Q. No. I understand that, but why don't you just do it  
25 the same way --

1 A. I did. Has been.

2 Q. Well --

3 A. You're suggesting I should use -- the game isn't the  
4 same. I think that's the simplest way to say it. Titan  
5 has no capacity costs that we have to pay extra. If  
6 there is any, it's buried in the energy cost.

7 Q. Do you know whether that's true?

8 A. I don't know if that's true.

9 Q. Would it surprise you to learn that it is true?

10 A. I don't know what to think about it. I wasn't  
11 involved with the contract on that facility.

12 Q. Okay. But I just want to make sure that we're clear  
13 about this. So let's presume -- and I'm not saying I  
14 agree with this, but let's presume for the sake of  
15 argument that you want to use the MISO average for the  
16 first year because you don't have any experience with  
17 Oak Tree.

18 A. Okay.

19 Q. Why do you need to continue to average it for the  
20 next four years?

21 A. Well, this was my initial proposal. I guess if it's  
22 subject to negotiation, we can certainly consider  
23 something else.

24 Q. Okay.

25 A. That's about all I can say.

1 Q. Do you know whether any of the 129 nodes that were  
2 studied by MISO represent the Titan Wind Project?

3 A. I don't know that, no.

4 Q. Okay. And do you know whether MISO does a separate  
5 calculation for each of those 129 projects?

6 A. I believe that's correct. I guess the last report I  
7 saw actually included 169 CP nodes, but I still don't  
8 know whether or not they do each one individually.

9 Q. Okay.

10 A. They probably do.

11 Q. Okay.

12 A. That information, however, is confidential so we  
13 can't look at a CP node and say that this year that  
14 particular node produced 10 percent versus some other  
15 particular node.

16 Q. So let me ask you this. I mean, you probably heard  
17 Mr. Lauckhart's testimony and his concern that, you know,  
18 you're going to calculate an average annual capacity  
19 payment and -- I don't know, monthly. I think that would  
20 be even worse. But, you know, that we might not agree  
21 with how you calculated that capacity payment.

22 Would it then be your contemplation and maybe you  
23 don't know but are we going to be back before this  
24 Commission every year trying -- wrangling about what the  
25 capacity payment should be and how it should be properly

1       calculated?

2       A.    Well, I would hope that one of the outcomes of this  
3       proceeding is a defined method.

4       Q.    Okay.

5       A.    And whatever that method is would be what we would  
6       do.

7       Q.    Okay.

8       A.    And it's not that complicated. We've got relative  
9       available records that anyone can look at. We're open on  
10      that. So if it becomes a question of whether you believe  
11      our load was this or Oak Tree was this on a certain hour,  
12      you'll know exactly what Oak Tree is because you'll have  
13      access to the metering.

14      Q.    Right. Let's change subjects for a bit. So I want  
15      to make sure I understand the division of responsibility  
16      between you and Mr. LaFave with respect to how the -- the  
17      hybrid method was calculated with respect to inputs  
18      assuming wind coal was serving the entire NorthWestern  
19      load and when NorthWestern was in the market acquiring  
20      energy resources in order to serve its load.

21            What was your function in that particular  
22      exercise?

23      A.    When we developed the hybrid method at the front end  
24      we had to figure out for a given year how much energy we  
25      had available from our own resources versus how much we

1 purchased from the outside.

2 So we looked at each hour throughout that year, and  
3 we compared the load on our system to the available  
4 generation and determined then if there was a shortfall.  
5 If there was a shortfall, obviously, then we'd have to go  
6 to the marketplace.

7 We averaged those analyses over the year and came up  
8 with blend rates. We've broken it down not only by  
9 annual basis, we've got it subdivided into on and off  
10 peak periods and seasonal and so on and so forth.

11 Q. And am I correct in stating that between January of  
12 2012 and between November 21, 2012, you changed your  
13 inputs into that model?

14 A. Yes.

15 Q. Okay. Can you describe for the Commission the  
16 changes you made to the inputs.

17 A. The changes were necessary because the original  
18 model had no mechanism to adjust for system load growth.  
19 It had fixed blend rates based on an average of I think  
20 2008 through 2011, average blend rates.

21 Well, that is not appropriate for a 20-year  
22 forecast. It might be okay for a few years but not for  
23 20. So we made adjustments so that each year the blend  
24 rates are recomputed based on the anticipated additional  
25 load that has to be served and the amount of base load



1 generations available.

2 Base load generation was taken as an average that we  
3 believe is going to be available based on historical  
4 availability data from the power plants over I think a  
5 10-year period.

6 Q. Okay. How did you calculate that load growth?

7 A. It was based on the last 10 years of history.

8 Q. Okay. And if you don't know, that's fine. But when  
9 NorthWestern does its 10-year plan does it use historic  
10 calculations?

11 A. Yes.

12 Q. Okay. Do you use econometrics models to do your  
13 calculations of load growth?

14 A. We don't have a particular -- is that a company name  
15 or I don't know. Econometric model? No, we don't. I'm  
16 sorry. We do not.

17 Q. Okay. Do you know whether you do -- I think it's  
18 called an end use analysis?

19 A. No, we don't. We have done those but been probably  
20 15 or 20 years ago.

21 Q. Okay.

22 A. They're expensive.

23 Q. Okay.

24 MR. UDA: Just a minute.

25 May I approach the witness?

1 MR. SMITH: Please.

2 MR. UDA: May I approach the witness?

3 MR. SMITH: You may. Now what are we talking  
4 about? Oak Tree --

5 MR. UDA: Oak Tree 19.

6 MR. SMITH: What is it, Mike?

7 MR. UDA: It is NorthWestern's June 17, 2010,  
8 ten-year plan. I'm referring specifically to page 9.

9 MR. SMITH: Is that the one that's marked on  
10 this exhibit list as NWE 2010 Ten-Year Plan?

11 MR. UDA: That is correct, Mr. Smith.

12 MR. SMITH: Thank you.

13 MR. UDA: And, Mr. Smith, can I approach the  
14 witness?

15 MR. SMITH: You may.

16 MR. UDA: I don't know if I need to.

17 Q. Mr. Green, do you have the --

18 A. Yes, I have page 9 here.

19 Q. Could you read the last full paragraph on page 9?

20 A. The last paragraph indicates these are based on a  
21 2009 integrated resource plan report adjusted for 2009  
22 actuals. "This forecast is based upon econometric  
23 analysis techniques. End use forecast were used for  
24 comparison purposes."

25 Q. Okay. So does this refresh your recollection about

1 the method that NorthWestern uses in its 10-year plan?

2 A. I wasn't a part of this plan. So I'm sorry. I  
3 really can't -- you know, it doesn't -- to my knowledge  
4 we have not done a real analysis in terms of what I think  
5 of when I think of econometric or end use forecast.  
6 There may have been other parties in the company that  
7 were involved.

8 Q. And I just want to make sure I understand. So your  
9 testimony is you're not familiar with NorthWestern's  
10 ten-year plan?

11 A. Well, not with this particular part of it at least.

12 Q. Okay.

13 A. For this year. This was a fairly old -- I think the  
14 new one is coming out soon.

15 Q. Well, I mean, maybe your recollection just needed to  
16 be refreshed, but I had thought you said you had not done  
17 one of these kind of studies for 15 years?

18 A. To my knowledge, we have not.

19 Q. Okay. So and I'm just going to ask and maybe you  
20 don't know, but is the statement in here incorrect?

21 A. Well, if someone did a study, I guess, and I'm not  
22 aware of it, that doesn't mean it's incorrect.

23 MR. BROGAN: Mr. Smith, I'm going to object to  
24 that question and ask that the answer be stricken.

25 Mr. Green has already testified that he wasn't involved

1 in the preparation of this 10-year plan and that, you  
2 know, to ask him whether a statement in it is incorrect  
3 or not after he's testified to that is improper.

4 MR. UDA: I'm going to respond to that because I  
5 strongly disagree. The witness has kind of been all over  
6 the map about what his involvement was with this  
7 particular process. He said, well, he hadn't necessarily  
8 seen this part, but before I put this in front of him he  
9 was pretty definitive about saying that he didn't think  
10 they had use an econometric analysis. I believe his  
11 testimony was, well, that is that a name of a company?  
12 And then I asked him if he used end use analysis, and he  
13 said no.

14 Obviously, there is some question as to what the  
15 level of his familiarity is with this document. Which  
16 I'm trying to establish -- and I'm also trying to  
17 establish whether he's familiar with the methodologies  
18 used within it.

19 MR. SMITH: I'm going to overrule the objection.  
20 And, please, Mr. Green, just answer forthrightly with  
21 respect to the knowledge that you do have. And don't  
22 speculate. Okay?

23 THE WITNESS: Okay.

24 Q. So the question is -- I want to just ask you, do you  
25 know anything about this document?

1 A. I know some things about it.

2 Q. Okay. Do you know anything about how the load  
3 growth analysis was prepared in this document?

4 A. I thought it was based on history, historical data,  
5 and not on an end use forecast or econometric analysis.

6 Q. Okay.

7 A. That's what my understanding was. These numbers  
8 that I see here, the demand numbers I see, look somewhat  
9 familiar historically. They've been adjusted since this  
10 period of time frame, I think. But that's all I can  
11 really say about it.

12 Q. Okay. So, again, I'm trying not to mischaracterize  
13 your testimony, but I just want to make sure I understand  
14 what you're saying.

15 What you're saying is you don't know for sure  
16 whether they used this or not; is that right?

17 A. I'm not sure they used the econometric analysis or  
18 end use forecast, no.

19 Q. So they might have been using an econometric  
20 analysis technique, and they might have been using end  
21 use forecast for comparison purposes?

22 A. Possibly.

23 Q. Okay. But that's not the approach you used in this  
24 proceeding, is it?

25 A. No. We used strictly a recent, if you will, 10-year

1 historical data trend.

2 Q. Okay. And let me ask you this because I want to  
3 make sure I understand the refinements that you made to  
4 the relative percentage of NorthWestern's load that's  
5 served by coal as opposed to being served with purchases  
6 in the market.

7 And I want to ask you, first of all, when you did  
8 that original analysis back in January of 2012 did you  
9 use the same method for determining load growth in that  
10 particular analysis?

11 A. The portion I worked on did not include any load  
12 growth consideration whatsoever.

13 Q. Okay. So is that to say that someone else did  
14 that?

15 A. I believe the five-year hybrid model that I  
16 developed was expanded by Mr. LaFave.

17 Q. Okay. So if I were to ask him -- when I ask  
18 questions about the assumptions that were in that  
19 January 2012 load growth forecast, that would be  
20 appropriately directed to Mr. LaFave?

21 A. I believe so.

22 Q. Okay. Do you know what method he used in the  
23 January --

24 A. No, I do not.

25 Q. Okay. Now I want to ask you about the other end of

1 the -- or excuse me. The same end but a different part  
2 of it.

3 Do your numbers with respect to your load represent  
4 only retail load?

5 A. The chart that's included in my testimony shows two  
6 lines. Well, I think in answer to your question, it is.  
7 Yes, that's correct. Only retail load. We have no  
8 wholesale load other than off system sales which are not  
9 firm obligations.

10 Q. Okay. So you don't have -- you didn't make any firm  
11 sales -- or you never make any firm sales?

12 A. Not any -- we used to years ago but not anymore, no.  
13 Off system, no.

14 MR. UDA: And this is Exhibit 18. Ms. LaFrentz,  
15 could you please provide the copies.

16 Q. This is kind of a weird exhibit because we had to  
17 put two pages together. So hopefully that will be easy  
18 for everyone to understand.

19 Let me know when you've had a chance to review the  
20 document, Mr. Green.

21 A. Yes.

22 Q. Okay. The first question I wanted to ask you about,  
23 the date of this document appears to be December 31,  
24 2010.

25 Would you agree with that?

1 A. Yes. Yes.

2 Q. Okay. And my understanding is that NorthWestern has  
3 an obligation to report to FERC as part of the FERC form  
4 on reporting process all of its sales for resale; is that  
5 correct?

6 A. That's correct.

7 Q. Okay. And if you follow the two maybe not so neatly  
8 taped together parts of this particular exhibit, there is  
9 a line 13 at the bottom, and it says "WAPA various" and  
10 it appears that in 2010 NorthWestern sold 220,080  
11 megawatt hours at resale; is that correct?

12 A. Uh-huh.

13 Q. Okay. And regardless of whether this is firm  
14 contracts or nonfirm, NorthWestern still had an  
15 obligation to serve that particular contract --

16 A. No. That's not a contract. That is surplus energy  
17 available. We don't need it. Those are our nonfirm  
18 off-system sales represented by that line.

19 Q. Right. But, regardless, if you agree to provide the  
20 power, you nonetheless have to provide it; is that  
21 correct?

22 A. But there's no volumes required under contract.  
23 It's strictly whatever happens. It's surplus. If it's  
24 zero, it's zero. Not obligated to anything beyond  
25 committing our surpluses to WAPA's marketing system.



1 Q. Okay. Now I want to ask you about how you  
2 calculated -- you calculated -- I think what you said is  
3 that you calculated your loads using historical data and  
4 then essentially trending it forward; is that correct?

5 A. That's correct.

6 Q. Okay. And when you did that did you look at your  
7 hourly loads too?

8 A. Not specifically. I'm trying to -- to increase an  
9 hourly load is very difficult to predict. We applied  
10 that same growth factor to each hour I think going  
11 forward.

12 Q. But when you looked at the historical data you had  
13 actual hourly data?

14 A. Absolutely, yes.

15 Q. And that was both on the load side and on the  
16 generation side; is that correct?

17 A. That's correct.

18 Q. Okay. Did you use in any way the actual hourly  
19 generation figures in your analysis?

20 A. Yes, we did.

21 Q. Okay. And how did you do that?

22 A. Basically historically -- now you've got to  
23 understand, this is one of the changes made in the model.  
24 The January model did look at things in that fashion.

25 Going forward we're using a fixed generation amount

1 that's available on average every hour.

2 Q. Okay.

3 A. But historically we looked at each hour's load and  
4 we looked at how much generation we had available that  
5 hour and we looked at how much purchases were required  
6 that hour. And then for that hour a blend rate would be  
7 calculated and then, of course, that was combined with  
8 all the other hours in the year to come up with the  
9 averages over a given period of time, whether seasonal or  
10 monthly or whatever period.

11 Q. Right. But the change you made in this current  
12 filing is you used the average that would be available as  
13 opposed to the actual that was available; correct?

14 A. That's correct.

15 Q. Okay. And why did you do that?

16 A. In order to look forward you have to assume  
17 something for a generation resource. We don't have any  
18 history to work on. We're not looking back anywhere.  
19 We're looking forward.

20 And so based on historical availability of our  
21 generating facilities one can reasonably assume that that  
22 amount is going to be available going forward. We have  
23 no evidence otherwise.

24 Q. Okay.

25 A. So that was applied on average to each hour looking

1 forward.

2 Q. Okay. But I want to make sure I unpack something  
3 that you just said because I'm not sure I understand it.  
4 When you decide to make this decision to go forward using  
5 the average, you did that because your assumption was  
6 that there's an average amount that's going to be  
7 available in every hour; correct?

8 A. That's correct.

9 Q. So how did you do it before?

10 A. We actually looked at the historical numbers by  
11 hour.

12 Q. Okay. So if you're using history to determine your  
13 load growth and you were using history to determine the  
14 generation available in every hour, why -- what was the  
15 felt need for the change?

16 A. To be consistent. The old method did not look at  
17 load growth at all. It had no inclusion of load growth,  
18 at least in the portion I worked on, the five-year  
19 forecast. So I had to have blend rates based on  
20 something so we used the average of the last four years,  
21 three and a half years or whatever it was.

22 Q. Could you have used the actual historical data or  
23 generation available for every hour doing this  
24 analysis?

25 A. I'm not sure it would be anymore accurate than what

1 we did.

2 Q. Okay. But you could have?

3 A. Theoretically, yes.

4 Q. And there wouldn't have been necessarily the same  
5 problem that you had on the load side, which was, as I  
6 understand it, is you were concerned that in the old  
7 model there was no component at least in the part that  
8 you performed that would account for historical load  
9 growth?

10 A. That's correct.

11 Q. Okay. So I guess I'm understanding why you did it  
12 on the load side. I'm not sure I'm understanding why you  
13 did it on the -- didn't do it on the generation side.

14 A. The generation side, the only way you can have a  
15 surrogate for future years is to look at the availability  
16 that's been experienced by the facility. And that's what  
17 we did. We looked at the availability. It's around  
18 90 percent or so on average for the three base load units  
19 and applying of course the generating capability to those  
20 units to that factor came up with what a reasonable  
21 average would be going forward.

22 Q. Okay.

23 A. I think it's consistent in the fact that just  
24 looking at three-year, four-year numbers whereas the  
25 availability numbers are based on the ten-year average

1 probably improves the picture also.

2 Q. Okay. Would you agree with me that the changes that  
3 you made to the hybrid methodology that we've just  
4 discussed resulted in NorthWestern being in the market  
5 fewer hours in the year?

6 A. No.

7 Q. Okay.

8 MR. UDA: At this point I'm going to ask the  
9 witness about what's been labeled Oak Tree Exhibit 17.

10 MR. SMITH: Okay. Do we have that? What's the  
11 exhibit number for -- I don't recall if you mentioned, of  
12 the FERC form, the one that we were just looking at.

13 MR. UDA: It was Exhibit 18.

14 MR. SMITH: That's 18?

15 MR. UDA: Yeah.

16 Q. Just let me know when you've had a chance to review  
17 that.

18 MR. BROGAN: Mr. Smith, may I ask Mr. Uda a  
19 question?

20 MR. SMITH: Please.

21 MR. UDA: Sure. Go ahead.

22 MR. BROGAN: Could you explain to me why you're  
23 asking Mr. Green about Mr. LaFave's testimony?

24 MR. UDA: Well, I don't know that it is  
25 Mr. LaFave's testimony. I mean, my understanding is --

1 and if I got this wrong, I'm happy to save these  
2 questions for Mr. LaFave, but my understanding was  
3 Mr. Green was the one who entered the input data that  
4 changed -- in our opinion anyway, changed the relative  
5 balance of the hours that NorthWestern's in the market.

6 And if he doesn't know, I mean, he can certainly  
7 say he doesn't know.

8 MR. BROGAN: Mr. Uda, your columns reference  
9 BJL 3 and Exhibit 1 to LaFave testimony.

10 MR. UDA: Right. I understand that. And the  
11 reason for that is because my understanding is that  
12 Mr. Green provided the data to Mr. LaFave and that  
13 Mr. LaFave made the actual calculations but the input  
14 data was from Mr. Green.

15 And if I've got that wrong, I'm happy to save  
16 these questions for Mr. LaFave.

17 MR. SMITH: Do you have an objection?

18 MR. BROGAN: No.

19 Q. So you just heard the discussion your counsel and I  
20 had. Did I get it right? Did you provide the input data  
21 to Mr. LaFave?

22 A. Yes. Input data, yes.

23 Q. Okay. Have you ever seen these particular  
24 calculations?

25 A. No. I have not seen these.

1 Q. Okay. So you're not familiar with this at all?

2 A. Not with this particular document, no.

3 Q. Okay. And so you don't know, for example, whether  
4 or not the input data that you provided to Mr. LaFave  
5 changed the number of hours that NorthWestern was in the  
6 market?

7 A. I guess my earlier response when I answered no to  
8 your question was because my intuition tells me that if  
9 you increase load without increasing base resources,  
10 you're going to get into the market much sooner. That's  
11 why I assumed or thought at least that it would look  
12 different than this looks.

13 Q. Okay. And when you say different than this looks  
14 how does this look to you?

15 A. Well, I don't know without doing analysis. I can't  
16 really answer to the specific numbers here. I would have  
17 expected that by including load growth that I provided  
18 would have swung the numbers just the opposite of this.  
19 But I have not seen, for example, the amount of market  
20 purchases or the amount of time in the market, if you  
21 will, from the January results anyway. So I guess I had  
22 no reference point.

23 Q. Okay. And when you say the opposite direction what  
24 do you mean by that?

25 A. Well, in other words, it would have -- the changes

1 we made would have or should have increased the amount --  
2 or the time in the market sooner, in particular, than  
3 what's shown here.

4 Q. Okay. And based on your understanding of this  
5 exhibit, that didn't happen?

6 A. Based on this exhibit, I guess it didn't.

7 Q. Okay. Now another question. This is changing  
8 subjects again. The incremental cost of the coal. My  
9 recollection is you used a number -- I think it was  
10 \$18.3 per --

11 A. 18.54.

12 Q. \$18.54 per megawatt hour. Were you the one that got  
13 that number?

14 A. Yes.

15 Q. Okay. And if you don't know the answer to this  
16 question, that's fine, but do you know what the  
17 consultants in the Big Stone study have said the variable  
18 cost of Big Stone is?

19 A. I do not know except for what I have heard from  
20 others.

21 Q. Okay. What have you heard from others?

22 A. Well, from you, for example. There's some \$70  
23 number. I'm not sure what that's based on.

24 Q. The record will reflect it was 40 but --

25 A. Okay. 40. But I find that hard to believe that



1 today that would be the right number.

2 Q. Okay.

3 A. Fuel cost.

4 MR. UDA: That's all. Thank you very much,  
5 Mr. Green.

6 Oh, yeah. Before I go, I would like to move to  
7 admit 17, 18, and 19.

8 MR. BROGAN: Mr. Smith, we object to 17.  
9 There's no foundation for it.

10 MR. SMITH: Staff, do you have a position?

11 MS. CREMER: Yeah. I don't even know really  
12 which one 17 is, frankly. Which one --

13 MR. SMITH: The comparison.

14 MS. CREMER: Okay. Kind of why I wanted  
15 everyone to mark them beforehand. Okay. I don't have an  
16 opinion. Thank you.

17 MR. SMITH: Mr. Uda, do you have a response?

18 MR. UDA: Well, Mr. Lauckhart prepared this  
19 side-by-side analysis from the witness's testimony. I  
20 mean, it's just an easy way for people to compare the two  
21 numbers.

22 MR. SMITH: But wasn't it a different witness?

23 MR. UDA: Yeah. It was a different witness. It  
24 was from Mr. LaFave's testimony.

25 MR. SMITH: Okay. Let's remember that. I'm

1 going to sustain the objection with respect to 17 and  
2 admit 18 and 19 for now.

3 MR. UDA: Thank you very much.

4 MR. SMITH: And, again, try to -- I'll help you  
5 try to remember.

6 MR. UDA: Thank you. I need all the help I can  
7 get.

8 MR. SMITH: Okay. Do you need a minute, Staff?  
9 A minute or two.

10 MR. UDA: While we had a little break here I was  
11 just wondering when are we planning on breaking for  
12 lunch?

13 MR. SMITH: I was going to kind of see what the  
14 flow went and do it that way. You know, depending on  
15 where we're at. Sometimes, you know, if we can conclude  
16 a witness or think we can, we'll go a little bit into  
17 noon.

18 Is there something that -- a conflict or  
19 something we need to work around?

20 MR. UDA: No. I was just curious.

21 MR. SMITH: Okay. I mean, that's what my  
22 assumption was, that we just kind of see. And we may end  
23 up breaking before lunch. We usually go with like about  
24 an hour and 15 minutes so people have time, the people  
25 that have to go somewhere, go out to eat and that kind of

1 thing.

2 Staff, are you ready to proceed?

3 MS. CREMER: Yes.

4 MR. SMITH: Please proceed.

5 MS. CREMER: We do not have any questions.

6 Thank you.

7 MR. SMITH: Okay. Commissioner questions.

8 Chairman Nelson.

9 CHAIRMAN NELSON: Mr. Green, in your November 21  
10 testimony, bottom of page 2, where we're talking about  
11 load growth, you indicate that the historical load  
12 growth, 2.25 percent -- and that's what you are  
13 projecting for the next 20 years; correct?

14 THE WITNESS: That's correct.

15 CHAIRMAN NELSON: Have you reviewed the exhibit  
16 attached to Mr. Rounds' November 21 testimony, Exhibit  
17 BPR 3 in which he talks about projected load growth?

18 THE WITNESS: I have looked at it, but I don't  
19 recall the specifics on that.

20 CHAIRMAN NELSON: Well, let me just ask the  
21 question if you've looked at it. He's projecting a load  
22 growth of .89 percent in the first I think 10 years and  
23 then shifting to I think .78 percent.

24 Can you explain to me why your projection is  
25 more accurate than what Mr. Rounds is projecting?

1           THE WITNESS: Other than the fact that that's  
2 what it's been doing the last 10 years, I have no proof  
3 of anything. His number almost appears to be the level  
4 of escalation we would expect for our peak annual demand,  
5 which really only reflects year-to-year growth of our  
6 weather sensitive load and not the base load on our  
7 customer system.

8           About 35 to 40 percent of our summer load is  
9 weather sensitive. We don't get a hot summer, we don't  
10 see that peak load. And so that peak number doesn't grow  
11 nearly as fast as the energy growth does.

12           Energy side, of course, reflects refrigerators  
13 and those kinds of things. Won't depend on ambient  
14 temperature for operation. That's the only thing I can  
15 think of that might explain that.

16           CHAIRMAN NELSON: Thank you. That's all I have.

17           MR. SMITH: Other Commissioner questions.

18           Commissioner Hanson.

19           COMMISSIONER HANSON: Thank you, Mr. Smith.

20 Mr. Green, good morning.

21           THE WITNESS: Good morning.

22           COMMISSIONER HANSON: You certainly know your  
23 stuff and appreciate very much the information that you  
24 provided to us.

25           You heard me have some discourse with

1 Mr. Lauckhart on floating average and concern listening  
2 to you and Mr. Uda, a little bit of exchange there on  
3 your opinions and thoughts regarding that.

4 I think you probably have -- my consternation is  
5 with -- frankly, I think you probably have I won't call  
6 it the best method. It's certainly the most -- in my  
7 mind at least it's the most accurate.

8 My trouble as I had expressed is the  
9 implementation of that after a period of time, and who's  
10 the unbiased third party, how do we implement that to  
11 make certain we aren't sitting here for one week every  
12 year trying to ascertain that.

13 You gave a little bit of information pertaining  
14 to the openness of the information, which certainly  
15 Oak Tree would have because they would be the generator  
16 so they'd certainly have that information as well.

17 Can you make me feel anymore comfortable with  
18 using a floating method as opposed to just fixing it  
19 ahead of time?

20 THE WITNESS: I have no objection to fixing it  
21 if we could come up with a number that actually occurred  
22 going forward. Because I strongly believe in a  
23 performance-based payment. In other words, if they  
24 perform, we'll pay for it. I have no issues with that.

25 But if we're just going to guess at a number

1 that currently appears to be higher than even available  
2 in the zone that we're operating in -- they're  
3 projecting 20 percent, and I think the last MISO analysis  
4 that was done for this last report that came out early  
5 December -- 15.2 percent I think for the zone that this  
6 site is in.

7 So if we were to establish something fixed, I  
8 have no problem as long as it's in a reasonable -- it's  
9 reasonable. But if it doesn't -- if history doesn't  
10 support it, I don't support it.

11 COMMISSIONER HANSON: Reasonable, however, is  
12 all relative.

13 THE WITNESS: That's an opinion.

14 COMMISSIONER HANSON: Reasonable is relative and  
15 depends on who's using the -- that's my concern. If we  
16 are basing it on history, history will change. And you  
17 can use five years. You can use one year. A year after  
18 that it's going to be different from what it was  
19 previously.

20 So we still get -- don't we get into the same  
21 situation of having to recalculate it?

22 THE WITNESS: I believe so. And that's why MISO  
23 does it on an annual basis. They update it every fall  
24 for the following planning year. And I think that's part  
25 of the issue is that you can't -- with wind in particular

1 and coinciding with peak requirements, putting those two  
2 together is very difficult to project.

3 And so they just look at a probability, a 50/50  
4 probability it's going to be above this level, below that  
5 level, average it out, and that's where it comes into.  
6 So I still support the floating rate I think has been  
7 used the term here.

8 And year-to-year updates -- and I don't think  
9 it's very complicated. I mean, the calculation is  
10 straightforward. It's quite simple.

11 COMMISSIONER HANSON: Is it? Do you ascertain  
12 that it would not create great consternation between the  
13 parties to calculate that on an annual basis?

14 THE WITNESS: I guess if the method is  
15 prescribed by the Commission, the only consternation  
16 would be whether the data is correct. And I submit that  
17 meter readings are what they are.

18 I mean, you can't -- unless we're cheating. You  
19 know, I can't see that that's an issue. Convincing them,  
20 I guess, is perhaps a problem. But I don't know what  
21 that would take.

22 I mean, they'll have -- the revenue meter at the  
23 substation next to the wind farm will have a recording  
24 device on it, and you can look back at every hour  
25 throughout history and extract that data. So that takes

1 care of the generation side of things on a given hour.

2 The recording data that NorthWestern has in the  
3 control center is similar. And we can provide that. Now  
4 I suppose a person could go in and change that  
5 arbitrarily, but I don't see it -- as Mr. Brogan's  
6 pointed out, we have no skin in this game. We're just  
7 trying to represent the customers. It doesn't matter to  
8 us financially. So we have no motive to change that  
9 data.

10 COMMISSIONER HANSON: Well, thank you. I  
11 appreciate that explanation.

12 Thank you, Mr. Smith.

13 MR. SMITH: Other -- Commissioner Fiegen.

14 COMMISSIONER FIEGEN: Mr. Green, did you look at  
15 Mr. Rounds' base load production and see the two  
16 different numbers, yours and his, and do you have a  
17 speculation on why they're different?

18 THE WITNESS: The base load generation or the  
19 load?

20 COMMISSIONER FIEGEN: Generation.

21 THE WITNESS: I guess I didn't look at the  
22 generation side of things that he was projecting. He --  
23 I do remember a 204 megawatt. Is that --

24 COMMISSIONER FIEGEN: Uh-huh.

25 THE WITNESS: I do remember I've seen that



1 number. I don't know how he arrived at that level. I  
2 guess I don't know what -- that program that he used, I'm  
3 not familiar with. So I really can't speak to an opinion  
4 about it other than I need to study the program more.

5 COMMISSIONER FIEGEN: We'll save the question  
6 for Mr. Rounds then.

7 MR. SMITH: Other questions? Commissioner  
8 questions?

9 Mr. Rislov, any questions?

10 I have one question. Is the MISO program used  
11 to compute what they call the ELCC? Is that a publicly  
12 available program? And that's what they call the  
13 capacity contribution to the resource adequacy mix.

14 THE WITNESS: Uh-huh. The program, I don't know  
15 there's a specific program. Are you talking about like a  
16 spreadsheet model or something like that?

17 MR. SMITH: Yeah. It's the thing that matches,  
18 you know, the output from a generating facility with its  
19 availability at every -- at various peak moments over the  
20 year, and they use that as a computational method.

21 THE WITNESS: Each year that I'm familiar with  
22 they publish a wind capacity report. And within that  
23 report they tabulate the historic wind farm production  
24 versus their system peak at the same time, you know,  
25 whenever that -- and they use the eight highest daily

1 system loads on their system.

2 That information is published, publicly  
3 available on their website. But the -- if they do any  
4 computational calculations behind that, I don't know that  
5 that's part of that publication, but they describe it as  
6 being a fairly simple calculation. It's not a -- it's  
7 not a big deal really, I don't think.

8 MR. SMITH: Okay. Thank you. Are you ready to  
9 proceed, Mr. Brogan, with redirect?

10 MR. BROGAN: Mr. Smith, yes, I am. And I think  
11 it will be short.

12 MR. SMITH: Okay.

13 REDIRECT EXAMINATION

14 BY MR. BROGAN:

15 Q. Mr. Green, first I'd like to go into this issue  
16 about what today apparently is a new term, a floating  
17 capacity credit. And I think to some extent your last  
18 answer to Commissioner Hanson may well have answered some  
19 of these, but I really want to be sure.

20 Is it correct -- well, to calculate the capacity  
21 credit each year what information do you need?

22 A. We need the -- if we have it, we need historical  
23 data available representing how much capacity was  
24 contributed to our peak load historically. We need that.  
25 We need to know the -- what I call or what most folks

1 call the maximum capability of the wind farm on a net  
2 basis delivered to the point of interconnection with the  
3 utility, whether it be the 18.9 or some similar number  
4 that's established.

5 Q. Do you need to know the eight peak hours for the  
6 year?

7 A. Yes, we do.

8 Q. And is that something that can be ascertained  
9 without any question after the fact?

10 A. Oh, absolutely.

11 Q. And do you need to know the production of the  
12 particular wind farm on those specific hours?

13 A. Yes.

14 Q. And is that information that can be ascertained  
15 without any question?

16 A. Yes.

17 Q. After the fact?

18 A. Actually it comes from the same document -- or the  
19 same asset -- excuse me. The same accounting software.

20 Q. And do you need any other information?

21 A. That should be sufficient.

22 Q. Changing gears slightly, do you recall some  
23 questions from Mr. Uda with respect to econometrics and  
24 one of these kinds of studies?

25 A. Uh-huh.

1 Q. When you said one of these kinds of studies, what  
2 did you mean?

3 A. I'm referring to a study that was done 15 or 20  
4 years ago that I was aware of that looked in depth at the  
5 demographics of NorthWestern's customer base and looked  
6 at other aspects of the economy at that time. I think  
7 that's probably what I was referring to.

8 Q. And are you familiar with the term "econometrics"?

9 A. Yes.

10 MR. BROGAN: No further questions.

11 MR. SMITH: Thank you.

12 Mr. Uda, do you have any follow on arising from  
13 Commissioner questions?

14 RECROSS-EXAMINATION

15 BY MR. UDA:

16 Q. I think Mr. Brogan asked you on redirect about the  
17 items that someone would need to calculate contribution  
18 to a utility's peak needs.

19 And I believe you said you would need the eight  
20 highest or the eight peak hours in a particular year; is  
21 that correct?

22 A. That's correct.

23 Q. Okay. And is that information publicly available?

24 A. It should be or could be, yes. We don't deem it to  
25 be confidential.

1 Q. Okay. And that information would be provided by  
2 NorthWestern to the facility?

3 A. It could be. You know, if that's what we end up  
4 doing, yes.

5 Q. Okay. And what if there is a disagreement about the  
6 relationship of the output of the facility to the load?

7 I think you previously testified that that's one of  
8 the difficulties in trying to figure this out on a  
9 plant-by-plant basis is having the coincident peak  
10 calculated based not only on the output from the facility  
11 but also upon the utility's peak needs?

12 A. I don't know that I testified that it was -- in this  
13 sense that it was difficult. If Oak Tree produced  
14 5 megawatts on our peak hour on July 17, it will be what  
15 it is. That's simple.

16 But we can't apply the results from some other wind  
17 farm. That would be a surrogate that has no basis other  
18 than it happens to be a wind farm.

19 Q. Okay. But my understanding of what you just said is  
20 that you would provide that information directly. Are  
21 you suggesting that there wouldn't be any disagreement  
22 about those numbers?

23 A. I guess if your people, Oak Tree's folks, looked at  
24 the data, the data is what it is. I mean, if hour 17 on  
25 July 17 is whatever Oak Tree produced that hour would

1 be -- I don't know how there could be a disagreement over  
2 that issue.

3 Q. Right.

4 A. And the same thing is true for a peak hour. If you  
5 want a third party, you go to WAPA because WAPA monitors  
6 our hourly load also. If that becomes necessary, we can  
7 certainly provide any of that.

8 Q. Okay. So in the event there was a disagreement, is  
9 NorthWestern suggesting they would accept our view of  
10 those numbers?

11 A. Well, there's only one view. If you look at an  
12 hourly record from the metering data, there's only one  
13 number.

14 Q. Okay.

15 A. How could you disagree with it, I guess is my point.  
16 Unless you have another meter that says differently.

17 Q. I'm constantly surprised about people's ability to  
18 disagree over things they shouldn't be. But there is a  
19 possibility there might be a dispute; correct?

20 A. There's a possibility of anything, yes.

21 Q. Right. So in the event that the two parties  
22 disagreed, we would be back in front of the Commission.

23 A. Unless we could resolve it otherwise.

24 Q. Right.

25 MR. UDA: Thank you. No more questions.

1 MR. SMITH: Okay. Before Staff proceeds, can I  
2 ask you one more question just to -- now are the eight  
3 periods, are those fixed dates, or are those dates that  
4 are determined as the what? The eight highest dates or  
5 how was that --

6 THE WITNESS: Yeah. The eight highest daily  
7 system peak loads that are experienced. And so they  
8 aren't established until after the fact, you know,  
9 looking back at the record.

10 MR. SMITH: So those could literally be eight  
11 consecutive days then.

12 THE WITNESS: Theoretically. That's correct.

13 MR. SMITH: Okay. Sorry, Karen.

14 MS. CREMER: Thank you.

15 CROSS-EXAMINATION

16 BY MS. CREMER:

17 Q. Good morning, Mr. Green. Do you have a projection  
18 for Titan's capacity credit for 2012?

19 A. For 2012?

20 Q. Correct.

21 A. Actually it's already been established. Our eight  
22 system peak load hours or days, I guess you'd say, have  
23 already occurred this year. And I calculated using the  
24 method we've been discussing here that I think it came  
25 out at 14 and a half percent for 2012. So that is

1 actually historical. It's in the books, so to speak.

2 MS. CREMER: Okay. Thank you.

3 MR. SMITH: Mr. Brogan, any last questions?

4 MR. BROGAN: None.

5 MR. SMITH: Okay. I think you may be excused,  
6 Mr. Green. Thank you very much.

7 (Discussion off the record)

8 MR. BROGAN: NorthWestern calls Steven Lewis.

9 (The witness is sworn by the court reporter.)

10 DIRECT EXAMINATION

11 BY MR. BROGAN:

12 Q. Good morning, Mr. Lewis. Would you please state  
13 your name and business address for the record.

14 A. My name is Steven E. Lewis, and my business address  
15 is 2719 California Avenue Southwest, Suite 5, Seattle,  
16 Washington 98116.

17 MR. SMITH: Maybe pull it down a little bit. Or  
18 over. Yeah.

19 THE WITNESS: Is that better?

20 MR. SMITH: Yes, it is.

21 THE WITNESS: Okay.

22 Q. Mr. Lewis, by whom are you employed?

23 A. Lands Energy Consulting.

24 Q. And who are you providing testimony on behalf of in  
25 this docket?



1 A. I'm providing testimony on behalf of NorthWestern  
2 Energy.

3 Q. Did you submit prefiled direct testimony in this  
4 docket on November 21?

5 A. Yes, I did.

6 Q. Before you is a document that has been marked for  
7 identification. Excuse me. Has been admitted as  
8 NWE 12. Could you take a quick look at that, please.

9 (Witness examines document)

10 A. Okay.

11 Q. Is that a true and correct copy of your prefiled  
12 testimony?

13 A. Yes. It does appear so.

14 Q. Did you also submit rebuttal testimony in this  
15 docket on November 28?

16 A. Yes, I did.

17 Q. And would you take a look at what has been admitted  
18 as Exhibit NWE 13?

19 (Witness examines document)

20 Q. Is that a true and correct copy of your rebuttal  
21 testimony?

22 A. Yes, it is.

23 Q. Mr. Lewis, would you please summarize your direct  
24 and your rebuttal testimony for the Commission.

25 A. So the initial testimony issued on November 21 was

1 fairly straightforward. It was essentially explaining an  
2 update that we made to the electricity price forecast  
3 that was incorporated into the hybrid model that  
4 NorthWestern was using to compute the avoided cost  
5 calculation.

6 And we made some changes from the prior forecast  
7 that we had used. And the changes are explained in the  
8 testimony itself, but I'll just mention them very  
9 briefly:

10 One was that we heard at the last set of hearings  
11 back in May I think it was that the -- some concern about  
12 using AECO versus a more closely -- a closer geographic  
13 point for the natural gas prices. So we looked to use  
14 pricing for the Ventura system as opposed to the AECO  
15 pricing. So we developed a methodology to do that.

16 We also reviewed our use of our prior forecast of  
17 the Minnesota Hub, which is a price point that's  
18 published by MISO. They also publish other price points.  
19 Minnesota is one of the ones that they summarize in one  
20 of their top level summaries. But we were able to go  
21 back and pull information from MISO for the Big Stone  
22 point of delivery within the MISO pricing system.

23 And so we used Big Stone. And then instead of  
24 relating the Minnesota Hub all the way to Synergy, which  
25 is in Indiana, we related the Big Stone price to the

1 Northern Illinois price instead.

2 So we basically came up with some different inputs  
3 into our pricing model, but it's essentially the same  
4 model. It goes through the same calculations that we  
5 discussed earlier this year.

6 We also reviewed the escalation rates. There was  
7 significant concern that the long-term escalation rates  
8 were on the low side. You know, we computed an  
9 escalation rate in this forecast that was basically  
10 pulled out of escalation rates that were in effect in  
11 the EIA forecast at the time. And so we came up with  
12 3.9 percent long-term escalation rate in this forecast.

13 So the methodology is still the same as the one  
14 before. It's just that instead of using the AECO price  
15 inputs, we used Ventura and basically correlated Ventura  
16 against Henry Hub, which is the major natural gas trading  
17 hub within the U.S. down in Louisiana. And then we used  
18 Big Stone in place of the Minnesota Hub and related that  
19 to Northern Illinois as opposed to Synergy with the  
20 update of the escalation rates.

21 And that actually resulted in a slight increase in  
22 our electricity price forecast than the one we had  
23 submitted prior.

24 So in the responsive testimony that was filed on  
25 November 28, that was responsive to the testimony that

1 was offered by Mr. Lauckhart as well as responsive to  
2 some of the analysis done by Mr. Rounds.

3 Basically the -- in response to Mr. Lauckhart's  
4 additional testimony there was a few points. One is  
5 Mr. Lauckhart basically asserts that he uses the same  
6 methodology that I did to forecast electricity prices.  
7 And that's really not the case.

8 He used the market heat rate that I computed, but  
9 then he applied it to an entirely different gas forecast  
10 to compute the electricity price forecast.

11 There was also an assertion that the market heat  
12 rate that we had used in our projections was low.  
13 Inordinately low. So we ran an actual observed history  
14 of spot pricing, which is the daily relationship between  
15 electricity prices and natural gas prices, to see if the  
16 forecast was similar to things that we've seen -- would  
17 have seen in the recent history back in 2011. And it  
18 compared favorably.

19 We talked a little bit about the EIA 2011 Early  
20 Release and its adequacy to provide guidance as of  
21 February of 2011. And we think that it certainly is  
22 appropriate to use that document from the energy  
23 information administration in preparing forecasts of that  
24 vintage.

25 And then we reviewed the -- Mr. Lauckhart used

1 five of potentially actually 29 cases from the 2010 AEO  
2 release, and he referenced in his testimony that you go  
3 back and actually look at the others that he did not  
4 select. So we went ahead and did that, and I provided a  
5 chart on page 4 of my responsive testimony highlighting  
6 the levelized natural gas prices from the five cases that  
7 Mr. Lauckhart chose versus the levelized natural gas  
8 prices from the other remaining cases that he chose not  
9 to use in preparing his forecast.

10 So that was basically the response to some of the  
11 issues that I saw with Mr. Lauckhart's testimony.

12 With Mr. Rounds' testimony, in reviewing that the  
13 one thing that I did note is that in basically using the  
14 EIA and the -- was it EPIS forecast? There's a point in  
15 the -- in Rounds' calculation where he basically takes  
16 the EIA electricity generation price forecast out of the  
17 EIA, and that essentially becomes the annual electricity  
18 price forecast.

19 The issue I have with that was that the EIA  
20 generation cost projections that they have for  
21 electricity in their summaries is not a market price  
22 forecast. But it's basically a -- they've got a bit of a  
23 different methodology between the RTO areas of the U.S.  
24 versus the nonRTO areas.

25 But it includes a number of costs that are not

1 appropriate in determining the marginal cost of units  
2 that would actually dictate what a market price is. So  
3 it's not explained very well in their documents, but, you  
4 know, it's, you know, been average price.

5 It includes fixed costs from plants. Excludes  
6 reliability costs from operating the RTOs and so forth  
7 that would not be appropriate for trying to determine the  
8 market price forecast.

9 And that summarizes it. Hopefully I didn't go too  
10 long for you all.

11 MR. BROGAN: Mr. Smith, I think that Mr. Lewis  
12 is prepared -- I would tender him for questions. I  
13 suspect that it will take considerably longer than the  
14 22 minutes to the lunch hour, however.

15 MR. SMITH: I think it will. Does it bother  
16 you, Mr. Uda, if we take a break at noon and your  
17 cross-examination gets interrupted? Is that a problem?

18 MR. UDA: The only thing I would suggest is that  
19 if you just give me 2 minutes with my expert before I  
20 commence and then we'll proceed until noon.

21 MR. SMITH: Okay. Thanks. Mr. Chairman, is  
22 that acceptable?

23 Basically we had a discussion up here in the  
24 front, and we kind of talked about it since we were in  
25 kind of a little break anyway and why not just take the

1 break now and we'll reconvene until 1 o'clock. We're in  
2 recess until 1 o'clock.

3 (A lunch recess is taken)

4 MR. SMITH: Good afternoon, everybody. We'll  
5 call the hearing back to order in Docket EL11-006, In the  
6 matter of the Complaint by Oak Tree against NorthWestern  
7 Energy for refusing to enter into a purchase power  
8 agreement.

9 It's approximately 1 o'clock, and we've just  
10 finished our noon recess.

11 Mr. Lewis, please take the stand. You've been  
12 sworn and so you're still under oath.

13 THE WITNESS: Very good.

14 MR. SMITH: We had concluded NorthWestern's  
15 direct examination of you, and we will go to Oak Tree.

16 Mr. Uda, cross-examination.

17 MR. UDA: Thank you, Mr. Smith.

18 CROSS-EXAMINATION

19 BY MR. UDA:

20 Q. I guess it's good afternoon, Mr. Lewis. How are  
21 you?

22 A. I'm doing well.

23 Q. Good. Glad to hear it. Could you please turn and I  
24 can't remember the exact exhibit number but it's page 1  
25 lines 22 and 23 of your responsive testimony. Which

1 exhibit is that?

2 A. I have NWE 12. That's the testimony from the 21st.  
3 The responsive testimony is NWE 13.

4 Q. Okay. I think it's NWE 13.

5 MR. UDA: That would be the responsive  
6 testimony, Al?

7 MR. BROGAN: Yes.

8 Q. Okay. Could you please turn to page 22, lines 21  
9 through 23. Are you there?

10 A. Yes, I'm there. Page 1, lines 21 and 23?

11 Q. Okay. And on line 20 it says, "Mr. Lauckhart's  
12 forecast uses the market heat rate I computed for the  
13 relationship between AECO and natural gas and the  
14 Minnesota hub and applied it to a fundamentals-based EIA  
15 natural gas forecast starting in January 2013 and ignored  
16 the available forward market information in favor of  
17 forecast data that was already out of date."

18 And I have a couple of questions for you about that  
19 statement.

20 The first is your prior forecast relied on the  
21 Alberta Energy Company forward gas prices; is that  
22 correct?

23 A. Yes. The prior forecast had used the AECO forecast.

24 Q. And you testified that you decided to use another  
25 natural gas price forecast in this proceeding. Did you



1 go back and look at what the AECO natural gas prices were  
2 on the same dates that you used for calculating a natural  
3 gas price in this proceeding?

4 A. Yeah. Actually the -- so in the last filing -- or,  
5 you know, the last round when I provided the forecast  
6 that was based on the Alberta Hub, and that was from --  
7 was it February 25 of 2011?

8 So that was the same date as the gas price forecast  
9 that we use when we prepared the latest forecast, which  
10 we used Henry hub. In fact, when we prepared the  
11 forecast earlier this year we initially went to NGX to  
12 get the February 25, 2011, data.

13 And at that point NGX referred us to go to the  
14 Intercontinental Exchange with whom they have an  
15 agreement for their pricing data. And so we actually  
16 received the AECO price data from the Intercontinental  
17 Exchange at that time, and they provided us the Henry hub  
18 for the exact same day.

19 Q. Okay. But my recollection -- and I know this has  
20 been a while, but my recollection is that electric price  
21 forecast and natural gas price forecasting was based  
22 on -- was prepared in October of 2011, not February of  
23 2011.

24 A. Well, our initial calculation had -- actually the  
25 initial calculation there was an October version that was

1 based on information we had available to us on October of  
2 2011. And then when we -- we also went through a process  
3 of come up with a price forecast that was February 2011  
4 vintage. And for that forecast we used data that was  
5 available as of February 25, 2011.

6 Q. Okay. When did you do that?

7 A. I thought it was the -- wasn't it May of this year?

8 Q. Okay. Well, there was a hearing in March. But my  
9 recollection of your testimony in that particular  
10 proceeding was that you hadn't prepared anything as of  
11 February, you were relying on your October 2011 study.

12 A. Okay. Maybe I'm remembering exactly when we did the  
13 February 2011 forecast.

14 Q. Well, I totally understand. It's been a while. I  
15 was just curious.

16 And so do you recall whether you've actually gone  
17 back and looked at what the AECO natural gas price  
18 forecasts were for February of 2011?

19 A. Yeah. I had looked at them, prepared a February  
20 2011 forecast.

21 Q. And but that was going backwards from October of  
22 2011?

23 A. Correct.

24 Q. Okay. Just wanted to make sure I understood that.  
25 Okay.

1           And is there anything inherently wrong with using  
2 the fundamentals-based forecast?

3           A.    You know, you can use it for appropriate purposes,  
4 and when it's, you know, what you're looking for.  But,  
5 you know, the point that I'm making is that the -- to use  
6 the fundamentals forecast that was at that point even out  
7 of date, bases the EIA forecast, does not seem  
8 appropriate in the use of actual market data to reflect  
9 what the then current trends were in the marketplace.

10           It seems like an appropriate approach in order to  
11 estimate the forward electricity price at that time.

12           Q.    Okay.  But other than it being dated, is there  
13 anything inherently wrong with using the  
14 fundamentals-based forecast?

15           A.    Well, I think we discussed this the last time I was  
16 there about the differences between a fundamentals-based  
17 forecast versus a market assessment using the method that  
18 we do.

19           And they're inherently different.  And the  
20 fundamentals-based forecast, you know, has a lot of  
21 different inputs that have to be managed and massaged and  
22 understood.  And it takes time to go through that process  
23 to do that.

24           You know, our forecast is -- has less inputs.  It's  
25 easier to pull together.  And particularly in a time when

1 market prices are changing it can be updated much more  
2 quickly to reflect changes in market fundamentals that  
3 ever occurred at any given time.

4 Q. So is there a risk, in your judgment, that the  
5 simplicity of the model that you're using also may mask  
6 some lack of complexity? In other words, the  
7 fundamental-based forecast you're saying is complicated.  
8 There's lots of stuff you have to massage?

9 A. Uh-huh.

10 Q. There's assumptions you have to make?

11 A. Correct.

12 Q. Your forecast is easier to do it's easier to  
13 represent indicate. But simpler isn't always better, is  
14 it?

15 A. That depends on the application.

16 Q. Right. Depends on the application. I would agree  
17 with that. And in certain circumstances if you have  
18 professional forecasting agencies doing fundamental-based  
19 forecasts, is there anything inherently wrong on, for  
20 example, this Commission relying on a fundamental-based  
21 forecast?

22 A. I think if they want to rely on the  
23 fundamental-based forecast, I think it's important that  
24 they understand how the models work, what the inputs are,  
25 what the sensitivities are to the inputs, where they come

1 from, what the potential variability of those inputs  
2 are.

3 There's a lot to understand about those models and  
4 to understand whether it's appropriate as a forecasting  
5 tool to use in a particular instance or not.

6 Q. Okay. But what I'm asking is I think what you've  
7 said is it's important for them to understand it. But  
8 other than the fact that it's complicated, is there any  
9 reason that they should not rely on a fundamental-based  
10 forecast?

11 A. You know, I think that the caution here is that, you  
12 know, even the complicated fundamentals forecast have  
13 inputs to them. And the people that run the models have  
14 to acquire and feed those inputs into the models.

15 And, you know, just because you have a big, complex  
16 model that's doing a bunch of computations and  
17 calculations with that data, doesn't inherently make it a  
18 better forecast.

19 Q. No. I'm not saying it's inherently better. I'm  
20 asking you is it inherently worse, and is there any  
21 reason this Commission should not rely on a  
22 fundamental-based forecast?

23 A. I think using a fundamental-based forecast as a  
24 point of input or a point of information is -- I mean, in  
25 the base question that's fine. It's the -- you know,

1 just understand what you're looking at and what you're  
2 using it for and how that may or may not create risk on a  
3 go forward basis.

4 Q. Right. And I think we asked -- I'll refresh your  
5 recollection. I believe I asked you the last go-around  
6 when you were here if you were familiar with the fact  
7 that, for example, the Black & Veatch fundamental-based  
8 forecast was used by banks to make lending decisions.  
9 And as I recall your answer was yes.

10 Does that refresh your recollection?

11 A. Yeah. I recall that.

12 Q. Okay. And the EIA natural gas forecast is a  
13 fundamental-based forecast too; correct?

14 A. Yes.

15 Q. Is it relied on by Government agencies to predict  
16 future events?

17 A. What kinds of events?

18 Q. I presume all sorts of policy making judgments.

19 A. I mean, if the question is, you know, do agencies  
20 use the information that's published by the EIA, the  
21 answer is yes.

22 Q. And among that information that they use, do they  
23 ever use the natural gas price forecast from EIA?

24 A. I would presume that people use it, yes.

25 Q. Right. Are you familiar with the Montana

1 proceeding?

2 A. Which one?

3 Q. The recent avoided cost proceeding.

4 A. Only in passing.

5 Q. Okay. Now I want to ask you this question about the  
6 same statement. You said that Mr. Lauckhart ignored the  
7 available forward market information in favor of forecast  
8 data that was already out of date. And I want to unpack  
9 that sent a little bit.

10 First of all, on what basis do you say Mr. Lauckhart  
11 ignored it?

12 A. Well, I mean, he chose to use the five different  
13 cases out of the 2010 AEO release. But in February of  
14 2011 there had already been a 2011 Early Release that had  
15 information contained it.

16 And there was also information generally available  
17 that the markets as of February of 2011 were already  
18 lower than the forecasts that were contained in the 2010  
19 projections provided by the EIA.

20 Q. Well, does that mean he ignored it, or does that  
21 just mean he disagreed about your opinion about whether  
22 it was a relevant point of information?

23 A. I guess you can say it either way if you want.

24 Q. Okay. So you say you can say it either way if you  
25 want. Do you know whether Mr. Lauckhart was aware of

1 that other data?

2 A. I presume he was.

3 Q. Okay. Is sow didn't just ignore it. He maybe as I  
4 asked earlier maybe he just considered it more relevant.  
5 Is that fair?

6 A. I don't presume to know what Mr. Lauckhart was  
7 thinking when he chose not to use them.

8 Q. Okay. Let me ask you this question: Did  
9 Mr. Lauckhart use cases out of the 2011 Early Release?

10 A. Not that I saw.

11 Q. Are you sure?

12 A. Well, you know, I was on the same process that  
13 Mr. Lauckhart was. We had one day of discovery and  
14 turned in responsive testimony the next day. So it was a  
15 pretty fast and furious review.

16 Q. Right. I understand that. And but I also don't  
17 recall -- maybe you recall, but I don't recall your  
18 counsel asking Mr. Lauckhart any questions about the 2011  
19 Early Release from EIA. Do you?

20 A. No. I don't recall any questions.

21 Q. Could you turn to page 15 of -- okay. Do you have a  
22 copy of Mr. Lauckhart's testimony, Oak Tree Exhibit 9,  
23 page 15?

24 A. So I've got the exhibit. Where did you want me to  
25 turn to?



1 Q. Page 15. Do you see a table that begins right after  
2 line 17 and continues down to line 18?

3 A. Correct.

4 Q. Okay. Do you see a column on that page? It would  
5 be six columns over. It says 2011 Early Release?

6 A. Yep.

7 Q. So Mr. Lauckhart did, in fact, include in his  
8 analysis the 2011 Early Release?

9 A. Okay. So he used the one -- that's right. Actually  
10 I remember this. He used the 2011 as one of the 10 cases  
11 along with the five cases chosen from 2010.

12 Q. Okay. All right. Now in your statement that I just  
13 talked to you about you state that ignored the available  
14 and forward market information.

15 What was the more current market information that  
16 you had?

17 A. Well, you know, as included in my testimony, we were  
18 using information regarding actual traded markets as of  
19 February.

20 Q. Okay.

21 A. And so that was the information that we were  
22 incorporating into our forecast.

23 Q. So, for example, that would include among that more  
24 current information, the February 18, 2011, report you  
25 got from Argus; is that correct?

1 A. The February 18 or the February 25?

2 Q. Well, I mean, I got four data points from you. I  
3 think there was one in March and three in February.

4 A. Yeah. We used the February -- our forecast that we  
5 prepared was based on the February 25 publication.

6 Q. Okay.

7 A. And we supplied some publications from dates before  
8 and after that.

9 Q. Okay. And you were comfortable based on these four  
10 different data points you got from Argus that these  
11 prices were consistent and representative of what was  
12 going on in the market at that time?

13 A. They were representative of the electricity market  
14 at those specific instances in time, yes.

15 Q. Okay.

16 MR. UDA: We're going to hand out the  
17 February 18 version.

18 MR. SMITH: Is that Exhibit 20?

19 MR. UDA: Yes.

20 Q. So my first question to you about this document,  
21 Mr. Lewis, is is this document confidential? Do we have  
22 to close the hearing?

23 A. No. I think for limited distribution we're able to  
24 discuss it nonconfidentially.

25 MR. UDA: Hey, John, can we go off the record

1 for just a second?

2 MR. SMITH: Yes.

3 (Discussion off the record)

4 MR. SMITH: I want to hear what NorthWestern's  
5 decision is because it's their document, and it's a  
6 document they paid for.

7 MR. BROGAN: Mr. Smith, I think there might be a  
8 little misunderstanding here. This isn't NorthWestern's.  
9 We don't subscribe --

10 MR. SMITH: I don't mean you.

11 MR. BROGAN: Lands Energy does. And I don't  
12 know that the -- the details of the license that Lands  
13 Energy has. I note that this document is a copyrighted  
14 document.

15 My interpretation would be that referring to it  
16 at an open hearing would be under the Fair Use Doctrine.  
17 As long as the document itself is not being copied and  
18 produced for commercial use. And I don't think there's  
19 probably any need to close the hearing.

20 MR. SMITH: Okay. Well, Mr. Uda, are you fine  
21 with that? You haven't made the decision that way.

22 MR. UDA: No. I mean, I just wanted to make  
23 sure that I wasn't getting myself in any trouble.

24 MR. SMITH: And Mr. Lewis seems to believe  
25 that's the case too, that those are the terms that you

1 got this under.

2 THE WITNESS: Yeah. That's my understanding as  
3 well.

4 MR. SMITH: I doubt that this hearing as  
5 important as it is will be read by millions of people.

6 Okay. Please proceed.

7 Q. (BY MR. UDA) Let me ask you a question about the  
8 February 18, 2011, Argus report. First of all, this is  
9 reporting sales that take place at various points on  
10 the Commonwealth Edison system in Chicago basically;  
11 right?

12 A. Yeah. There's -- are you specifically looking at a  
13 page?

14 Q. No. I'm just asking generally what your  
15 understanding is.

16 A. Yeah. They report prices for electricity  
17 transactions throughout the U.S.

18 Q. Okay. And on the first page of this document it  
19 says -- it's three rows down. There's a Midwest  
20 designation, and it says Northern Illinois. Is that --  
21 is that referring to the same points?

22 A. Yes.

23 Q. Okay. And when I look further down, there's a  
24 column that says megawatt and then trades. It appears  
25 there's no volume there; is that correct?

1 A. Yeah. It would appear that that's the case.

2 Q. Okay. And also turning now to page 5 of 13, there's  
3 two columns over that says Northern Illinois.

4 A. Correct.

5 Q. Okay. Is that -- I understand you used February 25,  
6 but is this the location of where you got the electric  
7 prices from Argus?

8 A. Yes.

9 Q. Okay. And that number is 39.65; is that correct?

10 A. You're on page 5?

11 Q. Yep. Page 5, Northern Illinois, peak price 39.65  
12 for calendar year '12?

13 A. Oh, calendar year '12.

14 Q. Yeah. Sorry.

15 A. 39.65. Correct.

16 Q. And were the numbers for February 25 and February 11  
17 and in March consistent generally on this price point?

18 A. You know, I don't recall the exact numbers off the  
19 top of my head, but I remember looking at the changes.  
20 They changed, but I didn't think that they had changed  
21 drastically.

22 Q. Not significantly?

23 A. Yeah.

24 Q. And is this the number that you provided to  
25 Mr. LaFave for input into his model?

1 A. You mean, the -- the numbers out of this table?

2 Q. Yes.

3 A. No. It's -- you know, the process that we use  
4 used this as an input to calculate the market price  
5 numbers.

6 Q. Uh-huh.

7 A. So that the calendar year 2012 through 2015 -- so if  
8 you continue down from the 39.65 there's additional  
9 prices down to 15. They go up to 47.

10 Q. Okay.

11 A. And then if you go over three columns, there's also  
12 an off-peak price.

13 Q. Right.

14 A. So the on-peak and off-peak prices that are in this  
15 table for 2012 through 2015 were inputs that we used when  
16 we calculated our projection of the forward price that  
17 was then given to Bleau for incorporation into his  
18 model.

19 Q. Okay. And so as of February and March of 2011 Argus  
20 had a price forecast that went out to calendar year 2015;  
21 is that correct?

22 A. Yeah. And it's -- you know, they put this  
23 information together based on actual transaction  
24 information that they get from people that are in the  
25 marketplace. So it's not actually a forecast.

1 Q. Right. Okay. So they're basing this on actual  
2 trades?

3 A. Correct.

4 Q. Okay. But on February 18, 2011, there were no  
5 trades; right?

6 A. Well, we actually don't know how many trades there  
7 were for calendar 2012 on that day because they don't  
8 report volume in this table on page 5.

9 Q. No. But they report how many trades were made on  
10 that particular day, don't they?

11 A. No. The table that you referred to on the first  
12 page is just for next day energy deliveries. So the  
13 prices that they report up on page 1 are just prices for  
14 just the next day delivery, and the volumes are  
15 associated with the data that they have for that  
16 transaction period.

17 Q. But you don't know for certain there were any  
18 trades, do you?

19 A. For the calendar year?

20 Q. Calendar year 2012, 2013, 2014, 2015?

21 A. No. They don't report the actual volume of  
22 transactions, but they are continuously polling the  
23 people that are in the market.

24 So when there are transactions or there is bid  
25 interest or offer interest in the market, they're getting

1 that information and incorporating that into their  
2 determination of what the price projection is for those  
3 years.

4 Q. Okay. Is it also true that Argus also publishes a  
5 gas price forecast?

6 A. Yes. That's true.

7 Q. Okay. Why didn't you just use the gas price  
8 forecast that Argus used?

9 A. We actually do not subscribe to the natural gas  
10 publication. And the information that we get from the  
11 Intercontinental Exchange is -- you know, it's the same,  
12 from the same day, and the Intercontinental Exchange is a  
13 widely known facilitator of the energy markets. So  
14 it's -- it's a very reasonable place to go get your  
15 natural gas information.

16 Q. Well, I wouldn't argue that the Intercontinental  
17 Exchange is a reasonable place to get natural gas  
18 information. But isn't it true when somebody prepares a  
19 electric price forecast they have in mind what natural  
20 gas prices will be doing because that's the primary  
21 driver of the electric price forecast?

22 A. Well, the people that are trading electricity on,  
23 you know, in this case February 18 or February 25, as  
24 they, you know, transact electricity on the forward  
25 market for cal '12, cal '13, cal '14, and so forth.



1 I mean, they're acutely aware of what the  
2 electricity markets -- natural gas markets, excuse me.  
3 So they understand the relationship between the different  
4 markets. It's -- I mean, they're --

5 Q. Okay. Well, let me ask you this: I have in front  
6 of me Exhibit 21, which is the methodology and code of  
7 conduct for Argus. And I would like you to distribute  
8 that.

9 And I'd like you to turn to the second page. And  
10 the first full paragraph under introduction. Are you  
11 there?

12 A. I'm there.

13 Q. Okay. Would you please read the first sentence of  
14 that paragraph.

15 A. "Argus U.S. electricity prices are based on daily  
16 surveyed data received from the noncommercial departments  
17 of market participants."

18 Q. Okay. And would you please read the first full  
19 sentence -- excuse me. The third full paragraph under  
20 introduction?

21 A. Can you get me pointed again?

22 Q. Yeah. Sure it's the third full paragraph, the first  
23 sentence.

24 A. Just the first sentence?

25 Q. You can just read the whole paragraph actually now

1 that I look at it.

2 A. "When insufficient data is received to support a  
3 volume weighted index calculation less than three trades  
4 of 25 megawatts minimum each are received, a clearly  
5 marked price assessment is made. The Argus assessment is  
6 an intelligent range of trade within the time frame set  
7 out in more detail below. Volumes and number of trades  
8 are left blank when an assessment is made."

9 Q. Okay. So when I look at Exhibit 20 and the day  
10 ahead peak prices, for example, they don't show any  
11 trades because it's blank; correct?

12 A. Correct.

13 Q. Okay. And then -- and I guess it's the next column  
14 on the same page. There's a heading that says  
15 assessments. Do you see that?

16 A. Yep.

17 Q. Okay. Could you read the first two paragraphs?  
18 They're short -- under assessments?

19 A. "In low liquidity markets Argus publishes  
20 assessments based on intelligent rate of trade. Argus  
21 assesses the range within which electricity did or could  
22 have traded based on actual deals and bids and offers  
23 throughout the trading day for next day power, historical  
24 price relationships, and other market conditions.  
25 Assessments are clearly identifiable from volume weighted

1 average indexes. The volume and number of trades will be  
2 blank where an assessment is made."

3 Q. So if we don't see a number in these various columns  
4 where it says megawatt and trades, we assume there was no  
5 volume on that day; is that correct?

6 A. Yeah. They made an assessment.

7 Q. Okay. And when they make an assessment they're  
8 exercising their professional judgment; is that correct?

9 A. That is correct.

10 Q. Okay. And we discussed certainly with respect to  
11 fundamental-based forecast, those people are doing inputs  
12 into their models based on their professional judgment;  
13 correct?

14 A. That is correct.

15 Q. Okay. So explain to me again the superiority of  
16 using this approach as opposed to a fundamentals-based  
17 approach to market forecasting.

18 A. Well, the -- I mean, the fact that they have to make  
19 assessments for the markets doesn't mean that the data is  
20 necessarily bad. I mean, they make -- they make the  
21 assessments using the information that they've referenced  
22 there, the bids and the offers in the market. You know,  
23 they're indicators that they have.

24 The point that I was making was that the use of  
25 these markets is as of February gives you a very clear

1 picture where the markets were in February of 2011. The  
2 use of the older data fundamental-based forecast, because  
3 of the time to prepare them, and specifically the use of  
4 publications from 2010 means that they don't necessarily  
5 reflect the current thinking of the different factors  
6 that were affecting the market as of February.

7 Q. Does that include the EIA AEO 2011 Early Release?

8 A. Does which include?

9 Q. Your criticism of the fundamentals-based approach.

10 A. Well, not necessarily. I mean, that was the -- you  
11 know, at that time that was the latest fundamental-based  
12 forecast from EIA.

13 Q. So a reasonable alternative to what you've done here  
14 would be to use the EIA early release; correct?

15 A. Well, the EI -- I mean, even in that case, I mean,  
16 we took, you know, special care as to make sure that we  
17 had electricity price information that was collected and  
18 assembled on February 25, consistent with February 25  
19 natural gas and electricity prices so that we had -- we  
20 had the linkage between the natural gas markets and  
21 electricity markets and the way that the traders and the  
22 various trading houses would have assumed that the  
23 relationship would have held.

24 You know, using the EIA forecast, we would have had  
25 to make, you know, some adjustments potentially for

1 that.

2 Q. Okay. And I gather your point is is that because  
3 this specific point here and this is a specific trading  
4 point and these prices are being reported on a daily  
5 basis, because EIA isn't focused on that particular kind  
6 of transaction, that their data is somehow less  
7 representative of what might be going on in this  
8 particular region; is that correct?

9 A. Well, I think it's less up to date certainly, and it  
10 doesn't -- you have to be careful of what you -- you  
11 know, what you're pulling out of the EIA.

12 Q. Right. But also would you agree with me that you  
13 don't really know what was going on in Northern Illinois  
14 in February and March of 2011?

15 A. Well, I have the reports from Argus that it clearly  
16 identified the prices that were being traded or  
17 potentially traded in the market in February of 2011.

18 Q. Do you know whether there were transmission  
19 constraints in that area of Northern Illinois during that  
20 period of time?

21 A. Not specifically, no.

22 Q. Do you know in there were any forced outages in the  
23 area at that time?

24 A. No.

25 Q. Isn't it possible, Mr. Lewis, that by taking this

1 very current-to-the-time data and picking a particular  
2 point that you've offered an unrepresentative sample of  
3 what was actually transacting in the market at that  
4 time?

5 A. You know, the -- it is -- I mean, it is possible  
6 that you're going to have swings in the market. The  
7 marketplace is volatile, as we've discussed before.

8 You know, the unit outages and the transmission  
9 constraints and so forth, that tends to affect like the  
10 prices reported on the first page, which were the next  
11 day transactions, much more significantly than they  
12 affect, you know, calendar 2012 through 2015.

13 So typically if there's a congestion issue, you'll  
14 see the prices on the front page will tend to move. And  
15 the calendar year prices on the later tables will tend  
16 not to move as much.

17 Q. Okay. But I think, circling back to it, you don't  
18 really know whether any of that's true, do you?

19 A. Well, if you're asking do I know what the -- you  
20 know, what the actual conditions on the grid were in the  
21 Chicago area back on those dates, no.

22 Q. Okay. Now let me ask you another question because I  
23 want to make sure I understand this. You didn't actually  
24 use the Argus numbers, except -- well, you did use them,  
25 but those aren't the numbers that you actually used when

1 you prepared your analysis; is that correct?

2 A. No. I used them.

3 Q. Okay. Now let me ask you this: So when you used  
4 these numbers at some point you provided them to  
5 Mr. LaFave to put into his model; is that correct?

6 A. Yeah. Provided them for the completed forecast of  
7 Bleau.

8 Q. Right. And did Mr. LaFave use, for example, 39.65  
9 or whatever the number was that you had for February 25?

10 A. Well, the -- the -- you know, this is in the  
11 testimony. So basically the prices that we got from  
12 Argus here were for Northern Illinois.

13 And obviously South Dakota is not Northern Illinois.  
14 So we were looking for pricing locations that were in the  
15 South Dakota region. The last time that we prepared the  
16 forecast we had looked at MISO's Minnesota Hub. This  
17 time we looked at the Big Stone point of delivery.

18 And what we did was is we went back and we used  
19 historical data from MISO to actually calculate the price  
20 difference on a daily basis between Northern Illinois and  
21 Big Stone. So we came up with an historical relationship  
22 between those different points on the grid, and then we  
23 applied, which was a reduction of like 4 and a half  
24 dollars I think it was.

25 Q. Right.

1 A. So we applied that reduction in price to the  
2 Northern Illinois prices that were in the table in order  
3 to create a projected price for Big Stone as opposed to a  
4 projected price for Northern Illinois.

5 Q. Okay. So let me ask you this question. So you took  
6 off 4 and a half dollars, \$5. I can't remember exactly  
7 what the number was. Because obviously electricity sold  
8 in Chicago has a basis differential between electricity  
9 sold in South Dakota.

10 That's generally your testimony; correct?

11 A. Yes.

12 Q. So you based that on location marginal prices in  
13 MISO; correct?

14 A. Yes.

15 Q. Okay. And doesn't MISO use locational marginal  
16 prices to send congestion signals to people who might  
17 want to use those points?

18 A. Well, I mean, it's representative of potential  
19 congestion on the grid, yes.

20 Q. Okay. So isn't it a price signal to people who are  
21 trying to do transactions about what particular point  
22 they could or should use in order to maximize the value  
23 of their transactions?

24 A. I mean, it provides that information, a lot of other  
25 indicative information.



1 Q. Okay. Do people actually do actual trades based on  
2 the MISO LNPs?

3 A. In terms of which?

4 Q. Like if I'm going to sell at a particular point, I'm  
5 not just going to use the MISO LNP; right? I'm going to  
6 make a trade and we're going to have a natural  
7 transaction that takes place that's not going to  
8 necessarily be depended upon the MISO LNP; right?

9 A. I'm assuming you can do it either way. You could  
10 have a transaction at a specific point that would be an  
11 agreed upon price. Or you could have a transaction that  
12 would be based on what the LNP clearing price is  
13 established by MISO.

14 Q. Well, that certainly could happen, but we don't  
15 really know whether or not these LNPs on MISO actually  
16 represent real prices or simply congestion signals based  
17 on the relationship between energy LNPs in Northern  
18 Chicago and energy LNPs in South Dakota, do we?

19 A. Well, there really isn't any difference. I mean, if  
20 the price at Big Stone is \$5 less than the price of  
21 Chicago, I mean, that's indicative that the prevalent --  
22 the energy flow is from the Big Stone area towards  
23 Chicago, and that there's -- there's \$5 of either cost or  
24 congestion between those two points.

25 The LNP price that settles for Big Stone is

1 indicative for what power that is delivered at Big Stone  
2 is worth in the marketplace, and in the price that they  
3 post in the LNP for Northern Illinois is what power  
4 delivered in that region is worth on that given day or  
5 hour.

6 Q. Isn't it also possible that what it reflects is the  
7 fact that there's significantly more congestion in the  
8 transmission system around Chicago than there is in  
9 South Dakota?

10 A. Well, I think that's probably the case. That's why  
11 the Northern Illinois price is \$5 more expensive than  
12 Big Stone.

13 Q. So you took the Argus price and adjusted it based on  
14 the marginal LNPs between Chicago and South Dakota, and  
15 did you do that all the way out to 2015?

16 A. Make the adjustment?

17 Q. Yeah.

18 A. Yes.

19 Q. Okay. So my question is did you base that  
20 projection into the future years based on events that  
21 were occurring in 2011?

22 A. No. It was based on the LNP pricing that was  
23 available prior to February 2011.

24 Q. Okay. And that -- how far out was that information  
25 available?

1 A. So if you go to my Exhibit SEL 2 on my testimony  
2 dated 11-21.

3 Q. Just give me a second. I need to find it.

4 Okay. I'm there.

5 A. So this shows the historical LNP pricing for heavy  
6 load and light load for the difference between Big Stone  
7 and the Illinois price points in MISO. So you can see  
8 that we used January of 2009 through September of 2010.

9 So it was data that was available -- that would have  
10 been available in February of 2011 and could have been  
11 compiled into an analysis.

12 Q. Okay.

13 A. And you can see right there at the bottom over that  
14 time period the average price differential was \$4.46. So  
15 the Big Stone point of delivery in MISO for that period  
16 from January 2009 through September 2010 on average was  
17 \$4.46 cheaper than energy in Northern Illinois.

18 Q. So when you made this decision to use this  
19 historical data to examine this relationship between  
20 Big Stone, Illinois, and MISO LNP pricing did it -- did  
21 you do any sort of reality check to make sure that there  
22 was not just an unrepresented period in the relationship  
23 between those prices?

24 A. Actually I did -- I pulled the information that I  
25 could pull out of the MISO's archived database and

1 assembled into the calculation. I mean, so I was able to  
2 pull January -- you know, the '09 through September of  
3 2010.

4 Q. Well, right. But I'm talking about this particular  
5 period in history that is represented by SEL 02.

6 Did you do any reality check to make sure that over  
7 this time period that appears in this table is actually a  
8 representative calculation of the historical difference  
9 between the marginal LNPs between Big Stone and  
10 Illinois?

11 A. The price difference didn't surprise me so I didn't,  
12 you know, go do other checks, if that's what you're  
13 asking.

14 Q. Yeah. That was what I was asking. All right.  
15 Thanks.

16 I'm sure you'll be happy to hear we're going to move  
17 subjects.

18 I did want to go back and ask you a question about  
19 your use of AECO in the prior proceeding when you  
20 submitted the first time.

21 A. Yep.

22 Q. Did you receive any criticism from Oak Tree or the  
23 Commission Staff about your reliance on AECO in the prior  
24 proceeding or hearing?

25 MR. BROGAN: Mr. Smith, I'm going to object to

1 that question. The record of what was said in the prior  
2 hearing is reflected in the transcript.

3 MR. UDA: My response to that is the witness has  
4 said that he changed the way he did this forecast because  
5 he received criticism. I'm just trying to clarify  
6 criticism from whom and about what.

7 MR. SMITH: Is that what you're talking about is  
8 what occurred on the official record last time?

9 MR. UDA: No. He's saying he received  
10 criticism, and I'm trying to clarify what he's saying  
11 he's received criticism about that was the impetus for  
12 him to change the inputs into the methodology in the  
13 manner that he did.

14 MR. SMITH: Mr. Lewis, is the criticism you were  
15 reflecting in your statement, is that -- did that occur  
16 at hearing?

17 THE WITNESS: I can tell you what I recall. And  
18 what I recall is that during the cross-examination  
19 process somebody asked Did you consider using a point  
20 like Ventura as opposed to AECO, something that would be  
21 much closer in proximity to South Dakota? I don't  
22 remember specifically who it was. But I do remember that  
23 question being raised.

24 MR. SMITH: So this was at hearing?

25 THE WITNESS: Yes.

1 MR. SMITH: I think I'm going to sustain the  
2 objection. The record speaks for itself.

3 MR. UDA: I'm not sure I understand the ruling,  
4 Mr. Smith. I apologize, but it seems to me that what  
5 you're saying is, well, the record speaks for itself, but  
6 only the witness can know where the criticism came from  
7 and it's his testimony.

8 MR. SMITH: Is there a way you can frame it to  
9 where we're going forward from that instead of having him  
10 try to remember what's in a record that he doesn't have  
11 there to look at?

12 MR. UDA: Well, I honestly think he answered the  
13 question in response to your question. So I was just  
14 trying to make sure.

15 It was a great ruling.

16 MR. SMITH: You can tell my ego is deeply  
17 involved in this. No. I mean, if you want him to go  
18 forward with what he did in response to that in the  
19 future, that's one thing, but to try to recall precisely  
20 what happened nine months ago, that's tough.

21 MR. UDA: Okay. I understand.

22 Q. So you didn't want to rely on AECO based on your  
23 recollection because somebody said you should use a point  
24 closer to South Dakota; is that right?

25 A. Yeah. I mean, I thought it was a reasonable point,

1 and I said, you know, if we have information related to  
2 Ventura, we can use that as well. And I proposed that to  
3 NorthWestern.

4 Q. Okay. And returning just briefly to the Argus  
5 information, does Argus publish a spark price figure  
6 along with their forecasts?

7 A. Yes. We have a spark number in that.

8 Q. So is that something that, for example, you or  
9 somebody else reasonably familiar with this kind of  
10 information could figure out the gas price that  
11 particular figure was based on?

12 A. Yeah. You can back calculate out what the gas price  
13 would have been.

14 Q. Okay. And I think you testified that you got your  
15 gas price information from the Intercontinental Exchange;  
16 is that correct?

17 A. Correct.

18 Q. Okay. Do you know whether or not Argus got their  
19 heat rate information from ICE?

20 A. I do not know for sure.

21 Q. Do you know how ICE develops its natural gas price  
22 forecasts?

23 A. Well, it's essentially the same process Argus does.  
24 I mean, the Intercontinental Exchange, or ICE, actually  
25 provides a trading platform for energy traders to

1 actually conduct forward transactions. And they use  
2 that.

3 So basically the trades are going through their  
4 system. And then they use that information to compile,  
5 you know, a similar sort of forward looking price for  
6 natural gas based on actual transactions for the day.

7 Q. And I don't want to mischaracterize what you've said  
8 so if I say anything here that's not accurate, please  
9 correct me.

10 But, you know, when we had this little discovery  
11 conference we asked you, you know, how you got the  
12 information from ICE. And I believe you said that you  
13 called ICE up and they gave you -- and I hope I'm using  
14 the accurate term. If it's not right then please correct  
15 me. They gave you a data dump?

16 A. Well, what they did, we called them up. Because you  
17 can go to ICE and you can get forward natural gas prices  
18 off of their website for no charge, but they're only good  
19 for today. And unless you're sitting there scraping  
20 their website every single day, you don't necessarily  
21 have data for back in February of 2011.

22 So, you know, back earlier this year we called them  
23 and said, hey, we're looking at putting some numbers  
24 together for February of 2011. Can you send me the  
25 forward prices that you published on those dates?



1           And they e-mailed me. I think it was about three  
2 different emails with files attached that had the data  
3 that we had published back in February.

4 Q.    Okay. When I looked at the data dump that you  
5 provided, I didn't see any volume or actual trades; is  
6 that correct?

7 A.    That is correct.

8 Q.    Okay. Is that because that information is  
9 proprietary?

10 A.    Well, they don't publish it.

11 Q.    Okay. Do you know how ICE determines gas prices  
12 when no volume is traded?

13 A.    That one we didn't -- we don't have the methodology  
14 like we did for the Argus. But I suspect it's, you know,  
15 something similar to what Argus goes through.

16 Q.    Okay. So because the Argus electric price forecast  
17 only goes out to 2015, you created a market heat rate  
18 calculation to extend your electric price forecast into  
19 the future; is that correct?

20 A.    That is correct.

21 Q.    And refresh my recollection. What was the year that  
22 that stops?

23 A.    2020.

24 Q.    Okay.

25 A.    Well, the -- the heat rate calculation between the

1 Argus electricity price and the natural gas price that we  
2 got from ICE was calculated until 2015, which is the same  
3 year that we have both sets of data. And then that heat  
4 rate relationship was used on the natural gas pricing  
5 that we had from ICE that went through 2020 to calculate  
6 what the electricity market would be based on what that  
7 projection of what natural gas pricing was through 2020.

8 Q. Okay. But the electric price forecast didn't stop  
9 at 2020, did it?

10 A. The --

11 Q. Your electric price forecast itself. I mean --

12 A. No. It continued out to 2032 or whatever.

13 Q. Okay. So when you got that market heat rate and you  
14 went -- I think you said you used through 2015 with Argus  
15 and you used through 2020 with ICE. Did you assume or  
16 lock in a certain market heat rate over that period until  
17 2020 and then continue it on into the future, or how did  
18 you do that?

19 A. Well, we used the -- I mean, we used the market heat  
20 rate for 2015 basically to carry forward 2016 through  
21 2020. So if the heat rate -- the relationship between  
22 the electricity market and the natural gas market in 2015  
23 was projected into 2016 through 2020, then after 2020 was  
24 when we applied the long-term escalation rate that we  
25 calculated from the EIA data.

1 Q. Okay. So when you calculated your market heat rate  
2 did it concern you at all that there may be an  
3 unrepresentative sample in the market presently between  
4 natural gas prices and electricity prices?

5 A. I was comfortable that the information that was  
6 obtained for February 25, 2011, was representative of how  
7 traders and people that actively transact those energy  
8 commodities thought that that relationship made sense.

9 Q. Okay. But, for example, if for whatever reason  
10 there's an energy price spike in 2015 and natural gas  
11 prices don't rise proportionally, that heat rate would  
12 change; correct?

13 A. In the assumption that, you know, the traders  
14 basically are, you know, trading electricity prices up  
15 and natural gas prices are not trading up, then the heat  
16 rate would -- you know, the implied heat rate or computed  
17 heat rate would change.

18 Q. Okay. So it didn't cause you any concern that what  
19 you were using, although it might be accurate in the  
20 short-term, might prove substantially inaccurate over the  
21 long-term?

22 A. Well, it -- I think, you know, keep in mind that  
23 the -- on February -- even though we pulled the data from  
24 one day, from February 25, you know, the contracts for  
25 say 2015 or 2014, you know, they are representative of

1 what the market thinks is an appropriate price for that  
2 year. So it's a -- you know, it's a whole year  
3 transaction versus, you know, a yearlong gas data.

4 You know, so, you know, the people that are trading,  
5 actively trading these markets are looking at those  
6 markets and those prices understanding that it's  
7 representative of, you know, an entire year in this case  
8 potentially. It's not a single day -- a single day  
9 event.

10 Q. So for your market heat rate for the heavy load  
11 hours what was the number you came up with?

12 A. I think it was in the -- just under 8 on an annual  
13 average, but it had -- you know, monthly it was up to 10,  
14 and I forget what the low was.

15 Q. Okay. Did you know what the average was?

16 A. I think it was in the high 7s for heavy load.

17 Q. Okay. And what about for low load hours?

18 A. I think it was around 5, if I remember correctly.

19 Q. Okay. Do you know what the heat rate of a typical  
20 peaking unit is?

21 A. Generally, yeah.

22 Q. Okay. Well, can you share?

23 A. It could be anywhere from, you know, 9 and a half or  
24 10 up to 12 or 13.

25 Q. Okay. So am I wrong in stating that if gas -- if

1 you have a -- if you have a peaker that is rated at  
2 10,000, and you have \$5 gas, it will cost them \$50,  
3 generally speaking, to generate one megawatt of  
4 electricity?

5 A. Generally speaking. It's the fuel cost conversion.

6 Q. All right. So if market is only 30, you wouldn't be  
7 operating that peaker in that market, would you?

8 A. In the hypothetical, no.

9 Q. Okay. Do you know what a new combined cycle  
10 combustion turbine 7FA unit and combined cycle mode would  
11 have as a heat rate?

12 A. It's significantly lower than that. I don't know  
13 precisely.

14 Q. Would you agree, subject to check, that it's around  
15 7,000?

16 A. Yes. I would agree with that.

17 Q. Okay. Would you also agree with me that most of the  
18 combined cycles combustion turbines in the Midwest are  
19 not that recent in technology?

20 A. Most of the combined cycle?

21 Q. Yeah. That they're older and they have older units?

22 A. I would presume you've got some older ones and maybe  
23 some new ones.

24 Q. Okay. But the fleet of combined cycle turbines in  
25 the region, and I mean by that the Midwest, wouldn't have

1 an average heat rate of 7,000, would they?

2 A. I doubt it.

3 Q. Okay. So using that same example of what we used  
4 before, if you have \$5 gas and you have 7,000 heat rate,  
5 it would cost them \$35 a megawatt hour just to generate;  
6 is that correct?

7 A. Walk me through the numbers one more time.

8 Q. Sure. I know doing math on this thing is always  
9 tricky. But you have \$5 gas. You have a 7,000 heat rate  
10 for this combined cycle combustion turbine, and it costs  
11 them \$5 under this hypothetical to generate; is that  
12 correct?

13 A. Yeah. That would be correct.

14 Q. Okay. I have calculated that the heavy load hours  
15 over the next 20 years the heat rate is 83.60. Would you  
16 agree with that subject to check? Does that sound high  
17 to you?

18 I think we just talked about I think you said it was  
19 in the high 7s or something like that.

20 A. And you're talking about the --

21 Q. Your calculation. I was just averaging it.

22 A. You were averaging over what period?

23 Q. Over 20 years.

24 A. On the projected?

25 Q. Yeah.

1 A. I haven't actually done that average but --

2 Q. Oh, yeah. I think I did. I think that's in your  
3 testimony, but I don't know what line it is right now.

4 Oh, yeah. It's on line 10 of page 2.

5 MR. BROGAN: Mr. Uda, excuse me. Are you  
6 referring to responsive or direct testimony?

7 MR. UDA: Yeah. Responsive testimony. Sorry,  
8 Al.

9 A. Which page?

10 Q. Page 2, line 10.

11 A. Okay. 8.36.

12 Q. Is that the average over 20 years?

13 A. You know, I actually think this is the -- the 8.36 I  
14 think is the heat rate that Mr. Lauckhart calculated from  
15 my original calculation.

16 Q. Okay.

17 A. And I think that's --

18 Q. You think it's too high?

19 A. What's that? No. Actually, you know, it's -- it's  
20 representative. I mean, it's 7. -- high 7s, low 8s.

21 Q. Okay.

22 A. I just --

23 Q. All right. Well, we'll just go with high 7s if  
24 that's okay.

25 A. We can use the 8.36 if you like. That's fine.

1 Q. Okay. So and the low load we have 51.70. Does that  
2 sound right?

3 A. Yep.

4 Q. Okay. So under this analysis is it your testimony  
5 that no peaking gas plant would ever run in the next  
6 20 years in the low load hours?

7 A. Well, that no peaking unit would run in the low --

8 Q. Right.

9 A. I mean, the thing you have to keep in mind is, you  
10 know, even though my forecast has monthly on peak and off  
11 peak, you know, the monthly on peak is -- you know, it's  
12 a period of -- you know, it's 16 hours a day across the  
13 month, you know, for each day across the month. So it's  
14 a lot of hours within the month.

15 And, you know, peaking units run when they're needed  
16 to peak. And they might run on a peak load day or a peak  
17 market day. And they might not. You know, they're not  
18 likely to run on all of those days. So that the market  
19 actually, you know, is representative of the average of  
20 the marginal units.

21 And, you know, would I typically expect a peaker to  
22 run at night? No. You know, I would expect that there's  
23 going to be other units, base load units and so forth,  
24 that are covering the load at night and/or the units on  
25 the margin, which is why the lower heat rate might make



1 sense.

2 Q. So it's your testimony that in this scenario that  
3 the combined cycle plants are the facilities that are on  
4 the margin in this analysis?

5 A. In the -- the combined cycle ones?

6 Q. Yeah. Combined cycle heat rate more efficient than,  
7 say, a peaking plant?

8 A. Well, again, you know, when you gather up all of  
9 these hours across a month you could have some hours  
10 within the heavy load or some hours within the light  
11 load. Where, you know, you've got higher heat rate units  
12 that are on the margin. You might have peakers that are  
13 on the margin.

14 Particularly in a low load you may get hours in a  
15 month where the marginal unit is a coal plant and it's  
16 setting a much lower electricity price.

17 You know, it's not representative to say that, you  
18 know, for, you know, an entire block of hours for a month  
19 that there's one specific unit or one specific type of  
20 unit that's going to be setting the marginal price for  
21 all of those hours.

22 Q. Right. I was generalizing. I realize that. But in  
23 general terms would you agree with me that if you use  
24 your heavy load hour heat rate and your low load hour  
25 heat rate, that it would be these combined cycle type

1 facilities that would be most likely to be the unit on  
2 the margin?

3 A. I mean, they would -- yeah. On average it appears  
4 that they would be the ones that are on the margin, on  
5 the heavy load.

6 Q. Now let me ask you about actual utility operations  
7 with respect to combined cycle combustion turbines.

8 A. Sure.

9 Q. Do they typically run all the time except for a few  
10 months of the year in light load hours?

11 A. Yeah. They typically run around the clock. They're  
12 not units that you want to shut down at night.

13 Q. Okay. So would combined cycles shut down typically  
14 every day if, for example, the energy price fell below a  
15 certain rate?

16 A. Well, the -- I mean, this is -- I mean, this is a  
17 tricky question in utility operations. Because  
18 there's -- you know, there's costs to cycle the units up  
19 and down, and there's also costs to go through a full  
20 shutdown and startup of units.

21 And so when utilities and utility operators are  
22 making decisions about how to operate the projects, you  
23 know, particularly with combined cycle units, you know,  
24 they have to analyze different potential options.

25 So they will look at, say, an operation where they

1 bring it up and they run it, you know, full load during  
2 the day, and they might back it down some at night if  
3 it's actually out of the money, as Mr. Uda has pointed  
4 out, but not take it all the way offline in order to  
5 avoid the cost of actually going through a complete  
6 shutdown/startup process, which can be very expensive in  
7 terms of the lifetime maintenance for the plant.

8         So there will be instances where you'll see combined  
9 cycle plants that will run in low load periods when  
10 they're not economic because on average over time over  
11 the hours that you're running it they are economic to  
12 run, and the most cost-effective way to run them is to  
13 avoid the startup and shutdown costs that would come with  
14 a complete shutdown.

15         Typically when they're backed off in that manner --  
16 in fact, this actually happens to coal plants  
17 occasionally. When they're backed off at night in that  
18 manner at that point they're running as low as they can.  
19 They can't dispatch any further down, and they're not  
20 going to basically be the marginal unit at that point.  
21 Something else is going to be sending that lower heat  
22 rate margin price at that point in time. Even though the  
23 co-gen, which is more expensive, may be operating as  
24 minimum generation level during that same time period.

25 Q. Yeah. I understand, you know, it's a complex

1 question of utility operations, but let me ask you a more  
2 simple -- or a simpler question.

3 Under your market heat rate would combined cycles  
4 continue to be profitable at night?

5 A. Well, I think I just explained how that's a -- you  
6 know, they would be out of the money at night, but you  
7 might actually see them run.

8 Q. Okay. But they might make the decision not to run  
9 them?

10 A. They might.

11 Q. All right. I want you to turn to the bottom of  
12 page 3 of your response testimony.

13 MR. UDA: Is this 13 or 14? 14. I have a hard  
14 enough time keeping track of my own exhibits, much less  
15 everybody else's. 13. Okay.

16 Q. Are you there, Steve?

17 A. Yes.

18 Q. There's a question that begins on line 25, page 3.  
19 "Have you reviewed the five 2010 AEO cases selected by  
20 Mr. Lauckhart, and are they representative of the full  
21 range of results provided by the EIA in this outlook?"

22 And basically, and you can correct me if I'm wrong,  
23 you're criticizing Mr. Lauckhart for selecting only cases  
24 that tend to skew the results from the 2010 EIA AEO  
25 report in favor of cases that produce a higher gas cost;

1 is that correct?

2 A. Yeah. And it's -- I mean, you can see that on the  
3 chart that was provided on the next page.

4 Q. Okay. All right. Did you run all 30 through and  
5 average them?

6 A. No, I did not.

7 Q. Okay. If you had done that and it produced a higher  
8 gas price forecast than the one you're using in this  
9 proceeding, would you say that he had done it  
10 appropriately?

11 A. No. As we've discussed before, I mean, I think that  
12 the whole -- you know, the market factors that were in  
13 play when the 2010 release came out were much different  
14 than things that were occurring in February of 2011.

15 Q. Right.

16 A. You know, which was why the reference case when  
17 that came out in early 2011 with updated information --  
18 you know, even that was more representative. And then  
19 using the market prices that were in effect as of the day  
20 that we were preparing the forecast makes more sense as  
21 well.

22 Q. Okay. But as we discussed previously, Mr. Lauckhart  
23 did consider the gas price forecast from the reference  
24 case in the EIA AEO early release; correct?

25 A. Yeah. It looks like that counted for one out of 10.

1 Q. Okay. But he didn't select any of the particular  
2 cases, did he?

3 A. Out of?

4 Q. Out of all the different things he looked at. He  
5 didn't select any particular one of all 10 cases; right?

6 A. Oh, the 10 that he put together?

7 Q. Yeah.

8 A. He averaged those.

9 MR. UDA: Mr. Smith, I'm going to review my  
10 notes for a second and go off the record and talk to my  
11 expert, and then I think I'm pretty well done with this  
12 witness.

13 Thank you for your indulgence.

14 (A short recess is taken)

15 MR. UDA: That's all I have. Before I finish,  
16 I'd like to move for the admission of OTE 20 and 21.

17 MR. BROGAN: Objection with respect to OTE 20.  
18 That's the February 18 price. It was not used to develop  
19 the prices in this docket.

20 MR. UDA: I'm sorry. My witness was chattering  
21 in my ear. What was the objection?

22 MR. BROGAN: OTE was not used to develop prices  
23 in this docket to develop the forecast, OTE 20. That's  
24 February 18. Mr. Lewis has testified that he used the  
25 February 25 one.

1 MR. UDA: I believe Mr. Lewis has also testified  
2 that he looked, examined the relationship between all  
3 four data points and concluded from it that that was one  
4 of the reasons he was comfortable with February 25. And  
5 also we did ask Mr. Lewis for the February 25 report, and  
6 he did not provide it to us.

7 So this is what we have and we think it's  
8 relevant and it's part of the way that Mr. Lewis prepared  
9 his forecast, and I think that the objection should be  
10 overruled. But that's just my opinion.

11 MR. SMITH: I'm going to overrule the objection  
12 from the standpoint that to me the questions you asked  
13 were not that extremely centered around precise numbers  
14 for that particular date but more on methodology,  
15 et cetera. So I'm overruling it.

16 Mr. Lewis, do we need a break before we move on  
17 or --

18 THE WITNESS: Forge ahead.

19 MR. SMITH: With that, Staff, turn to your  
20 cross-examination.

21 MS. CREMER: We have no questions. Thank you.

22 MR. SMITH: Okay. We'll turn to Commissioner  
23 and advisor questions.

24 CHAIRMAN NELSON: None here.

25 MR. SMITH: Commissioner Hanson.

1           COMMISSIONER HANSON: Forging ahead isn't such a  
2 tough deal, is it?

3           THE WITNESS: I didn't think it would be this  
4 easy. I'm sure you've got a question for me.

5           COMMISSIONER HANSON: Mr. Lewis, this is more  
6 for curiosity for my own gratification, but when we were  
7 talking about combined cycle and winding them down during  
8 the evening because that's when most of the wind  
9 generation is available at least typically, do you lose  
10 some of the heating component from the primary generation  
11 for the secondary heat exchange?

12           I assume that on a CCG when it's wound down that  
13 you lose some of the benefits from running it at a higher  
14 rate.

15           THE WITNESS: Well, the efficiencies will  
16 decline when you do that. So the actual -- you know, the  
17 heat rate probably shifts from, you know, a 7 or 8 number  
18 to something higher when you run at a partial load.

19           And that could depend on -- you know, actually  
20 the combined cycle, some of them have dock firing, which  
21 actually hits it at a much higher repeated rate than the  
22 rest of the unit can be fired separately. So there's a  
23 lot of different combinations.

24           But really it's not so much when the wind's  
25 blowing at night, but it's the fact that the load is much



1 lower at night so, you know, people are going to bed and  
2 the heating's going down and there just isn't places to  
3 put the electricity. And then when you've got a lot of  
4 wind on top of that that can compound it. You know,  
5 that's been the case for years and years and years even  
6 before the wind projects were on the system.

7 COMMISSIONER HANSON: Sure. Natural gas is --  
8 well, I shouldn't assume, but I've always known or heard  
9 that natural gas fired plants are the best plants to use  
10 for working with wind integration into the system.

11 Is that accurate, in your opinion?

12 THE WITNESS: Yeah. Well, actually hydro is the  
13 best but --

14 COMMISSIONER HANSON: That's true. Thank you  
15 for correcting me.

16 THE WITNESS: There's not places to put a lot of  
17 new hydro. So in terms of what you're going to build  
18 now, natural gas is a logical selection, particularly  
19 given the way the natural gas prices are.

20 COMMISSIONER HANSON: When you're talking about  
21 locational marginal pricing LMP with MISO and this arena  
22 and you back off combined cycle, then that marginal price  
23 is going to increase, and is it then noncompetitive, so  
24 to speak, or less likely to compete?

25 THE WITNESS: Yeah. I think there's a couple

1 steps there. You know, as you back down a unit at night  
2 and reduce supply, you know, that's going to have a  
3 tendency to create some upward pressure on the price  
4 because you're reducing the supply in the marketplace.  
5 So that can create, you know, a little bit of an upward  
6 pressure in terms of how the market reacts to that  
7 reduction in actual output.

8           You know, but there's -- you know, as you look  
9 at the units basically what they're trying to do is  
10 they -- as they go through the different stacks and  
11 dispatch the units as they're trying to dispatch them in  
12 the most economic fashion. And that's, you know, for all  
13 the projects, not just natural gas but coal and so forth.

14           COMMISSIONER HANSON: We were talking -- or  
15 Mr. Uda was asking you questions about signals from the  
16 LNP. Originally LNP -- I try not to testify. Try not to  
17 answer the question when I'm asking it.

18           Are you familiar with why the locational  
19 marginal price was originally established?

20           THE WITNESS: Yes.

21           COMMISSIONER HANSON: And that was not to send  
22 signals -- well, it was intended to send price signals  
23 and establish which generation facility would enter into  
24 the market at what point in time.

25           But there are additional signals from that;

1 correct?

2 THE WITNESS: Yeah. And I think it's --  
3 because, you know, what Mr. Uda was talking about was  
4 sort of this basis differential or the -- or basically  
5 it's the difference between the LNP price in Northern  
6 Illinois and the LNP price at Big Stone.

7 And basically what that's telling is if you've  
8 got generation that's at the Big Stone site, you know,  
9 it's going to be worth whatever that LNP price is at that  
10 point. Versus the LNP price if you've got generation  
11 that happens to be in Northern Illinois. It's going to  
12 be worth that additional price.

13 Now the price differential is reflective of  
14 either the transmission costs or the congestion value.  
15 Between those two points.

16 So if you've got, you know, a generator on one  
17 side that's, you know, able to -- that has access to  
18 transmission, can get from one side of the congestion to  
19 the other, it's going to be able to deliver into the  
20 higher priced market.

21 So, I mean, you get price signals that tell you  
22 what generation's worth at different points on the grid,  
23 but by looking at the differences between the different  
24 prices you get an understanding of what the transmission  
25 essentially between the different points is worth as

1 well.

2 COMMISSIONER HANSON: And, historically  
3 speaking, I believe your testimony would support that LNP  
4 price is historically less in South Dakota than  
5 elsewhere. I believe you used the figure \$5.

6 THE WITNESS: Yeah. Specifically what we looked  
7 at was the LNP for Big Stone point versus the Northern  
8 Illinois point. And it was, you know, very consistently  
9 the Big Stone price was lower than the Northern Illinois.  
10 On average it was about 4 and a half.

11 COMMISSIONER HANSON: And is that mainly by --  
12 for the reason of congestion?

13 THE WITNESS: Yeah. It's going to be a  
14 combination of congestion and transmission costs. It's  
15 actually -- I mean, it's primarily because energy must be  
16 primarily flowing from that region towards Northern  
17 Illinois, which is not surprising because you're going to  
18 have more generation here.

19 You're going to have a lot of load in the  
20 Chicago area. And so, you know, the power is typically  
21 moving in that direction. And there's going to be time  
22 periods where it's not like fully congested, but there's  
23 cost to transmit power.

24 And then you also have times where you have  
25 congestion pricing. And, you know, we see this in the

1 area where I'm from in Seattle. You know, the pricing in  
2 the Northwest, Pacific Northwest, tends to be  
3 significantly lower than California pricing. And power,  
4 you know, almost year-round flows out of our region into  
5 California. You know, it's just the LNP pricing reflects  
6 that reality that that's how the energy is moving on the  
7 grid.

8 COMMISSIONER HANSON: Okay. And so to the point  
9 that Oak Tree would benefit from that competitive factor  
10 then, that it would experience the same opportunities  
11 that any other generation in our area would have that  
12 would have that \$5 basically if we continue -- if I may  
13 use that.

14 THE WITNESS: Yeah.

15 COMMISSIONER HANSON: Would benefit from having  
16 that position in the marketplace.

17 THE WITNESS: Yeah. Exactly. And that's one of  
18 the reasons why it's -- you know, you want to be careful  
19 to make sure that you are looking at these different, you  
20 know, locational pricing for units that are in this area.

21 Because that is the pricing that indicates what  
22 the market value of that project's output will be in that  
23 region. I think that's what you were saying.

24 COMMISSIONER HANSON: Yes, it is. And that was  
25 the point.

1           And the second point is a little less abstract  
2 in that it gives us pause to be using just an average  
3 within MISO when we should be looking more at a nodal  
4 price or a locational price as opposed to the average.

5           THE WITNESS: Correct.

6           COMMISSIONER HANSON: Okay. Thank you.

7           Thank you, Mr. Smith.

8           MR. SMITH: Chairman Nelson, you have a question  
9 now?

10          CHAIRMAN NELSON: Just one. I believe very  
11 early as you were discussing you were asked about the  
12 market forecast that Brian Rounds relied upon. And you  
13 had some criticism of that. And part of that criticism  
14 was because it included fixed costs of plants and a few  
15 other things that it included.

16          THE WITNESS: Yeah. Basically the EIA  
17 generation cost projection that they have in their report  
18 is -- it's like a rolled up cost of generation within the  
19 different regions. So it includes -- it includes fixed  
20 costs for the plants. It includes -- it's not a  
21 calculation of the unit that's -- that are on the margin.  
22 It's got rolled up the base load unit underneath them and  
23 so forth.

24          I also in a discussion with one of the Staff  
25 people at EIA they indicated that they actually have a

1 little bit of a difference between how they calculate  
2 that number for areas that are covered under an ISO like  
3 the Midwest ISO versus areas that are not.

4 And basically the areas that are not, they're  
5 continuing to do exactly how I explained it where they're  
6 basically computing fixed costs for the full fleet along  
7 with variable costs.

8 For the ISO areas they are doing what -- what  
9 she explained is they were doing a market forecast, but  
10 then they're adding on top of that reliability cost  
11 adders on top of that. Or, in some cases, bond payments  
12 that were made to set up the ISO and things like that.

13 So it didn't seem to me that that was an  
14 appropriate projection, which is kind of frustrating  
15 because I think the EIA has forecasted market prices that  
16 they don't normally put in the publications in some of  
17 the work that they do.

18 CHAIRMAN NELSON: But if all of those costs end  
19 up being a cost that has to be recovered by the  
20 generator, isn't that going to impact the market cost,  
21 the market price?

22 THE WITNESS: It will influence the decisions on  
23 people -- on whether people want to invest in building  
24 generation in those markets. But once the generation is  
25 built, the markets become dictated by the variable cost

1 component only.

2 And so, you know, if you can pay \$5 to run your  
3 unit today and it's worth \$7 in the market to sell it,  
4 you will do that, even though you may be carrying fixed  
5 costs that actually are much more than \$7.

6 CHAIRMAN NELSON: Thank you.

7 MR. SMITH: Other Commissioner, advisor  
8 questions?

9 Mr. Rislov.

10 MR. RISLOV: Just to begin with I'd like to  
11 follow up on that.

12 Would you describe the Northern Illinois Hub  
13 prices as being only variable? There are no fixed costs  
14 included in those prices?

15 THE WITNESS: Well, the -- when the units that  
16 are available to serve that market, when they decide to  
17 run, they're going to run based on just their variable  
18 cost, which is going to be the cost of the fuel and, you  
19 know, some variable O&M components. And so, yes, the  
20 market's dictated -- or governed by just the  
21 variable cost components --

22 MR. RISLOV: I agree, but I don't think that was  
23 my question.

24 I think my question was are there fixed costs  
25 being recovered by any of those participants in that



1 market at the rates that were published that we saw in  
2 Exhibit 20?

3 THE WITNESS: Oh, yeah. Yes. There's -- I  
4 mean, the -- you know, the market becomes established by  
5 the highest cost variable unit in the market typically.  
6 And so any unit that's got a lower variable cost than  
7 where the market's established, you know, that money can  
8 be used -- you know, basically it's income. They can use  
9 it however they want to pay their fixed costs or  
10 whatever.

11 MR. RISLOV: So if I could take it a step  
12 further, how would that then compare to what you're  
13 saying on EIA's fundamentals forecast where I think you  
14 stated you had talked to someone involved in preparation  
15 of those market price forecasts?

16 How would that alter or let's say make the EIA  
17 forecast less responsive to the needs of this hearing  
18 than the Northern Illinois Hub comparison to the Big  
19 Stone?

20 THE WITNESS: Well, it's -- because in this case  
21 where you have a -- you know, a specific instance where  
22 the cost to NorthWestern -- or the cost of impact of  
23 having the wind generator on their system is basically  
24 just placed on the market purchase certain hours. So you  
25 want to prepare a forecast that is specifically a

1 forecast of that market price.

2 And the way the EIA calculates their generation  
3 cost projection is it's just -- it's an apples and  
4 oranges cost projection. It's not something that they've  
5 put together to actually forecast that market price.  
6 That's not the intent of that number, and that's not what  
7 they prepare it for.

8 MR. RISLOV: When you say forecast that market  
9 price, are you saying EIA's forecast is not applicable to  
10 this area or in general it's not a forecast or market  
11 price for whatever area they --

12 THE WITNESS: Yeah. The costs that they report  
13 as cost of generation is not a market forecast. It is  
14 simply a projection of the rolled up cost of the  
15 generation on the grid. So it's appropriate for the area  
16 as a cost of generation, but it's not a market  
17 projection.

18 MR. RISLOV: When I initially read your  
19 testimony and going from the Northern Illinois Hub to the  
20 Big Stone node, you know, it struck me that given the  
21 changes that can be I shouldn't say forecasted perfectly  
22 for the next 20 years in the market but I think  
23 reasonably we can expect there's going to be some change,  
24 you know, whether it's new transmission, new  
25 technologies, whatever, aren't you concerned about how

1 narrow your forecast is by simply looking at that  
2 Northern Illinois pricing point and then comparing it  
3 based on heat rate to the Big Stone hub?

4 THE WITNESS: Yeah. I think the market's  
5 subject to volatility. I think the mechanism, the  
6 process is fine. You know, I think the -- the markets do  
7 change.

8 And, you know, that's why, you know, if we take,  
9 you know, six months, 12 months as we go through and look  
10 at different market price projections, you know, the  
11 markets react and they change and they're not the same  
12 from time to time.

13 MR. RISLOV: If you were in the business of  
14 building capacity, generation, as of February 2011, would  
15 you base your decision on the analysis you completed for  
16 this case?

17 Would you base your decision on how much  
18 generation and what type of generation to construct based  
19 on what we're seeing for your market rate in this case?  
20 How reliable would that be?

21 THE WITNESS: I certainly would use this  
22 projection for -- as a component of my thinking in terms  
23 of what would be appropriate. And I think it's an  
24 appropriate reflection of what the market value would  
25 be.

1           MR. RISLOV: It struck me again, and you've come  
2 up with some interesting observations, I guess, with  
3 regard to perhaps what Mr. Rounds has testified to in  
4 this case. But the issue that keeps coming back to me is  
5 is there a way to make your forecast more robust than  
6 perhaps what some would think it would be, because of the  
7 limitations in the time proceeding, you know, that  
8 February 25, LEO date, perhaps because of the narrowness  
9 of the scope going from Northern Illinois to the node at  
10 Big Stone?

11           I mean, how would you make that more robust if  
12 you had more than, let's say, a week or two to put this  
13 case together unlike what I guess you did?

14           THE WITNESS: Well, you know, I would use -- I  
15 would use more current data, you know, and longer tracks  
16 of record. You know, so I'd fill in -- you know, if I  
17 were making the decision today, which obviously we can't  
18 in this case, but I would fill in the data through  
19 current and old current information and use that.

20           You can look at sensitivities up and down in  
21 terms of the pricing, you know, and things like that.

22           MR. RISLOV: And I was referring to, you know,  
23 pretending we are in December of 2010 at this point and  
24 you were going to make it more robust. You would  
25 basically say the same things what you just said now,

1 look at more sensitivities, different scenarios, that  
2 type of thing?

3 THE WITNESS: Yeah. I mean, I think that's a  
4 fair thing to look at, sensitivities both up and down. I  
5 mean, I think we considered the information that was  
6 available at the time, and we think that this is -- this  
7 is appropriate for decision-making purposes reflective of  
8 February of 2011.

9 MR. RISLOV: Thank you.

10 MR. SMITH: Any other Commissioner questions?

11 Mr. Brogan, do you want to forge ahead now or  
12 should we have a short break or what do you think?

13 MR. BROGAN: Mr. Smith, we've been going about  
14 an hour and a half, a little over an hour and a half.  
15 I'd really prefer a break, if we could.

16 MR. SMITH: Okay. Commissioners, any  
17 objection?

18 Why don't we take a break until about a quarter  
19 to, and then we'll reconvene. We're in recess.

20 (A short recess is taken)

21 MR. SMITH: We'll call the hearing back to order  
22 after our midafternoon recess. And we're at the point of  
23 redirect testimony by NorthWestern of its witness Lewis.

24 So please proceed, Mr. Uda. No. Mr. Brogan.

25 MR. BROGAN: Thank you.

1 MR. SMITH: Why do I get you guys confused?

2 MR. BROGAN: I don't know. I have much shorter  
3 hair.

4 MR. SMITH: You do. You don't have a beard.  
5 Mr. Brogan, please proceed.

6 REDIRECT EXAMINATION

7 BY MR. BROGAN:

8 Q. Mr. Lewis, I'd like to clear up what seemed to be  
9 confusion earlier. Do you recall some questions from  
10 Mr. Uda with respect to whether or not you had done a  
11 February forecast in your initial testimony?

12 A. Yes, I do.

13 Q. Do you recall that in your initial testimony from  
14 January that you testified about the relationship between  
15 your October forecast and a February forecast?

16 A. Yes.

17 Q. Do you recall whether the February forecast was  
18 higher or lower than the October forecast?

19 A. As I recall, the February forecast was lower.

20 Q. Do you recall the questions from Mr. Lewis [sic] and  
21 I think from others about the market heat rate?

22 A. The questions from who?

23 Q. Mr. Uda. Not from yourself. Mr. Uda and others  
24 about the market heat rate?

25 A. Yeah. I recall questions about the market heat

1 rate.

2 Q. In your expert opinion, is the market heat rate  
3 impacted by the penetration of wind into the market?

4 A. You know, we've seen recently in market areas with  
5 significant wind penetration that the heat rates have  
6 declined in the last year or so.

7 MR. BROGAN: Those are all the redirect  
8 questions I have.

9 MR. SMITH: Thank you.

10 Mr. Uda, do you have any follow-up questions  
11 maybe centered around the Commissioners' questions?

12 MR. UDA: Well, I have one question, but it was  
13 prompted by Mr. Brogan so I don't know if that's out of  
14 bounds or not.

15 MR. SMITH: Do you have an objection?

16 MR. BROGAN: No.

17 MR. SMITH: Fire away.

18 RECROSS-EXAMINATION

19 BY MR. UDA:

20 Q. When you say that penetration in the market can  
21 affect the heat rate, what penetration and what region  
22 are you talking about?

23 A. Specifically the ones that I look at is in the  
24 Northwestern where they've got significant amounts of  
25 wind generation has been installed on the Bonneville

1 system. And their nighttime heat rates have gone way  
2 down in the last year and a half, and they've seen  
3 instances of negative pricing on a number of hours.

4 And, you know, just -- that's just par for the  
5 course with a significant amount of free generation  
6 that's operating on the system.

7 MR. UDA: No more questions.

8 MR. SMITH: Any follow up, Mr. Brogan?

9 MR. BROGAN: No.

10 MR. SMITH: Staff, did you have anything, any  
11 response to Commissioner questions?

12 MS. CREMER: We did not. Thank you.

13 MR. SMITH: Okay. I think, Mr. Lewis, you may  
14 step down. And thank you.

15 Are you ready to call your next witness?

16 MR. BROGAN: NorthWestern calls Mr. Bleau  
17 LaFave.

18 (The witness is sworn by the court reporter.)

19 DIRECT EXAMINATION

20 BY MR. BROGAN:

21 Q. Mr. LaFave, would you state your name and business  
22 address for the record, and please spell your first and  
23 last names for the court reporter.

24 A. Sure. My name is Bleau LaFave. My business address  
25 is 3010 West 69th Street, Sioux Falls. My first name is



1 spelled B-L-E-A-U. Last name spelled L-A capital  
2 F-A-V-E.

3 Q. And by whom are you employed?

4 A. NorthWestern Energy.

5 Q. Did you submit prefiled direct testimony in this  
6 docket on November 21?

7 A. I did.

8 Q. Before you is a document that has been admitted that  
9 is marked Exhibit NWE 14. Would you please take a moment  
10 to review it and tell me when you've finished.

11 (Witness examines document)

12 A. Okay.

13 Q. Is NWE 14 a true and correct copy of your prefiled  
14 direct testimony from November 21?

15 A. It is.

16 Q. Did you also submit rebuttal testimony in this  
17 docket on November 28?

18 A. I did.

19 Q. Mr. LaFave, I might have made a minor error so  
20 before we go to your rebuttal testimony, is NWE 14 the  
21 confidential version of your testimony?

22 A. Yes.

23 Q. And there's a document before you that's been marked  
24 NWE 15. Is that the public version of the same testimony  
25 with the confidential material redacted?

1 A. I'm not finding the redacted parts, but it looks  
2 like the same testimony.

3 Q. All right. And then turning now to NWE 16, would  
4 you please review that and tell me when you've finished.

5 (Witness examines document)

6 A. Okay.

7 Q. Is that a true and correct copy of your rebuttal  
8 testimony that was filed on November 28?

9 A. It is.

10 Q. Mr. LaFave, would you please summarize your direct  
11 and your rebuttal testimony, please.

12 A. Certainly. My direct testimony reviews the proper  
13 inputs to the avoided cost model. It reviews the  
14 components of the avoided cost model. It then goes  
15 through the capacity contribution to the avoided cost and  
16 the energy contribution to the avoided cost and relates  
17 that to NorthWestern Energy.

18 And then it associates how it relates to Oak Tree  
19 directly and utilizes the appropriate historical and  
20 market information and into a form that is repeatable and  
21 into a form that is -- includes information that is  
22 public and/or, as I stated earlier, historical.

23 My rebuttal testimony includes discussions with  
24 Mr. Lauckhart's testimony and Mr. Rounds' testimony  
25 concerning some representations made within their

1 testimonies concerning prices either associated with  
2 NorthWestern's projects or other claims that were made  
3 and also concerns with utilizing regional pricing or  
4 utilizing other market data that is not readily  
5 available, that is repeatable, and also concerns with  
6 utilizing comparisons with costs that NorthWestern can't  
7 avoid. Based on the avoided cost for NorthWestern it has  
8 to be costs that are avoidable by NorthWestern customers.

9 MR. BROGAN: Mr. LaFave is available for  
10 questions.

11 MR. SMITH: Thank you.

12 Mr. Uda, please proceed.

13 MR. UDA: Thank you, Mr. Smith.

14 CROSS-EXAMINATION

15 BY MR. UDA:

16 Q. I would like to turn you first to the bottom of your  
17 responsive testimony on page 1. And I apologize. I've  
18 forgotten again what NorthWestern's numbering on that  
19 is.

20 MR. BROGAN: 16.

21 MR. UDA: Is there a confidential version of  
22 this too, Al? No?

23 A. I don't believe so.

24 Q. On line 22 there is a Q and A that begins "Does \$74  
25 per megawatt hour represent NorthWestern's incremental

1 costs for Big Stone, and does that affect NorthWestern's  
2 avoided cost under this docket?" And your answer is no  
3 and no.

4 Do you see that?

5 A. Yes.

6 Q. Okay. So the first question I want to ask you is  
7 isn't one of the options that's still presently on the  
8 table to replace Big Stone?

9 A. No.

10 Q. Okay. So that decision has already been made?

11 A. That's right.

12 Q. Okay. And when was that decision made?

13 A. I believe it was made May of 2011.

14 Q. Okay. May of 2011. I would like to -- this is  
15 Oak Tree Exhibit 11, which is NorthWestern's 10K from  
16 February 16, 2012.

17 Have you had a chance to review that, Mr. LaFave?

18 A. No.

19 Q. Okay. I specifically, when you read it, wanted to  
20 turn your attention to the bottom of page 1 and the top  
21 of page 2.

22 A. Okay.

23 Q. Okay. Would you please read the sentence that  
24 appears on the bottom of page 1 and the top of page 2  
25 into the record.

1 A. "We are working with the joint owners of the  
2 facilities to evaluate options."

3 Q. Okay. And the first part, there's a sentence that  
4 precedes that. Could you read that too?

5 A. "Big Stone and the Neal 4 facilities are subject to  
6 additional emissions reductions requirements."

7 Q. And so this basically says that you're working with  
8 the joint owners to consider options about what to do  
9 with both Neal and Big Stone; is that correct?

10 A. No. Not necessarily. They could be talking about  
11 the technologies and they're reviewing options. What I  
12 do know and have already been present within this docket  
13 is the CEOs have voted in May of 2011 to go forward with  
14 the upgrades to Big Stone.

15 Q. But isn't that decision ultimately up to this  
16 Commission?

17 A. I don't think so. I think the Commission would  
18 approve it in rate base, but I don't know if the decision  
19 to go forward would be up to the Commission.

20 Q. You don't know whether or not the Commission  
21 presently has a docket before it where it's considering  
22 the application to approve the environmental retrofit of  
23 Big Stone?

24 A. NorthWestern does not have a docket before this  
25 Commission.

1 Q. But EL-027 NorthWestern is an Intervener; correct?

2 A. Correct.

3 Q. And I would presume, and you can correct me if I'm  
4 wrong, that you are discussing these issues with the  
5 other co-owners of the Big Stone plant; correct?

6 A. I would presume. I'm not part of those discussions.

7 Q. And the Commission ultimately has -- and if you  
8 don't know, please say so. The Commission ultimately has  
9 the authority to decide whether to approve the Big Stone  
10 retrofit; correct?

11 A. They have ultimate -- an ultimate decision to decide  
12 whether to include it into rate base.

13 Q. Okay. If they made a decision not to include it  
14 into rate base, could NorthWestern afford that?

15 A. I can't answer that.

16 Q. Okay. So NorthWestern could absorb a \$500 million  
17 capital cost?

18 A. That would not be NorthWestern's share, and I  
19 couldn't answer your question. It's very hypothetical at  
20 best.

21 Q. Okay. So you own 22, 23 percent of Big Stone?

22 A. About there, yes.

23 Q. And how is it that the environmental retrofit and  
24 the various upgrades to Big Stone to allow it to meet the  
25 various air pollution control requirements imposed by

1 EPA, how is that not an avoidable cost?

2 A. The power purchased under this contract with Oak  
3 Tree would not change any of the decisions associated  
4 with Big Stone. They are not like resources.

5 Q. Okay. They're not like resources. Is what you're  
6 saying by that, that Oak Tree's too small?

7 A. I'm saying Oak Tree is of different size. It is  
8 also not schedulable. It is also not dispatchable. It  
9 is also not -- it would also be of a totally different  
10 scale to provide both the energy and capacity so they  
11 are -- there are a difference.

12 Q. Right. Do you know what the capacity factor for  
13 Big Stone is?

14 A. I do not know off the top of my head. It's -- I  
15 believe it's in Mr. Green's testimony.

16 Q. Okay. I don't recall what it is either, but let's  
17 just suppose for the sake of argument it's a coal plant  
18 and has a 75 percent capacity factor. Is that fair?

19 A. That sounds low, but okay.

20 Q. Okay. Did Mr. Lauckhart use a 75 or 80 percent  
21 capacity factor when he calculated the avoidable cost for  
22 Oak Tree?

23 A. I don't believe he did.

24 Q. Okay. Isn't it substantially lower than that?

25 A. Yes.

1 Q. And the capacity contribution that Staff,  
2 NorthWestern, and Mr. Lauckhart are talking about in  
3 their testimony is all substantially lower than the  
4 capacity contribution of the coal plant like Big Stone;  
5 correct?

6 A. Yes.

7 Q. So haven't those differences already been taken into  
8 account?

9 A. I don't believe they would have been. If you're  
10 talking about just the cost for capacity? Is that what  
11 we're talking about here?

12 Q. No. What I'm saying is -- and, again, I don't want  
13 to overstate this but what I'm asking you about is it  
14 seemed to me your testimony is there's a difference  
15 between the product and the quality of the power and the  
16 availability of the power and so on for Big Stone and  
17 that would be -- which would be provided by Oak Tree.

18 And my question to you was haven't all of those  
19 differences in quality of power, availability of power,  
20 all of those things been taken into account in the  
21 calculations that the various parties have made here with  
22 respect to calculating an avoidable cost for Oak Tree?

23 A. They would be, but not directly tied to Big Stone.  
24 Big Stone's representation in the avoided cost would be  
25 the marginal cost, which was identified 18.50 something



1 in Mr. Green's testimony, as far as that marginal cost  
2 associated with our avoided cost.

3 Q. Why isn't the pollution control equipment -- which I  
4 don't know exactly what your contribution to that whole  
5 number is going to be, but it's a substantial amount of  
6 money that people are going to have to pay to upgrade  
7 that. And if there are cheaper alternatives, shouldn't  
8 you be pursuing those?

9 A. If there were cheaper alternatives, we should be  
10 pursuing them, or we should at least evaluate them to see  
11 if they are for our like. But as it's been identified  
12 in -- or as we've gone through and moved through to  
13 approve this, we feel the environmental upgrades are the  
14 best path for pursuit of our base load energy needs.

15 Q. Okay.

16 (Discussion off the record)

17 MR. SMITH: Okay. Mike, you can proceed again,  
18 I think.

19 Q. Okay. If there were cheaper alternatives in the  
20 market, I think you've testified that NorthWestern would  
21 pursue those alternatives?

22 A. We would evaluate them, make sure everything is  
23 consistent but, yes, we would pursue them.

24 Q. Haven't you just told us in this proceeding that the  
25 market price --

1 (Unidentified person joins the meeting telephonically)

2 MR. UDA: That's going to make for an  
3 interesting sentence.

4 Q. But haven't you just told us in this proceeding that  
5 the market price for electricity for the next 20 years is  
6 \$37.99 a megawatt hour?

7 A. No.

8 Q. Well, I'm confused then because it seems to me like  
9 that's the avoided cost number that's been provided.

10 A. NorthWestern's avoided cost is based on a split  
11 between its base load generation costs and market price  
12 costs. The market price costs were provided by  
13 Mr. Lewis, and I believe the market price average was  
14 somewhere around 46 to \$47.

15 Q. Okay. But would you agree with Mr. Lauckhart's  
16 analysis that the cost to retrofit Big Stone is \$75 a  
17 megawatt hour?

18 A. No.

19 Q. Okay. What part of it do you disagree with?

20 A. NorthWestern's costs are not \$74 an hour project for  
21 Big Stone.

22 Q. Okay. Do you know what they are?

23 A. They are still under evaluation. We have an  
24 estimate for what the completion of the project will be,  
25 but we do not know. And we would calculate a year-one

1 cost when we do know. And that, as described by  
2 Mr. Lauckhart earlier, was the highest point and then  
3 would reduce after that point.

4 Q. Okay. But would it be higher than \$46 a megawatt  
5 hour for 20 years?

6 A. There's a possibility not.

7 Q. Okay. But you can't today provide us with that  
8 number?

9 A. I'm not part of that project or that, no.

10 Q. Do you know where Mr. Lauckhart got the numbers for  
11 the Big Stone?

12 A. According to his testimony, it looked like it was a  
13 filing by either -- I think, Otter Tail.

14 Q. Right. And it was based on a report by Burns &  
15 McDonnell?

16 A. Yep.

17 Q. Okay. Are you familiar with Burns & McDonnell?

18 A. I have seen that report.

19 Q. Okay. Is Burns & McDonnell a reputable firm?

20 A. Yes.

21 Q. Okay.

22 A. From what I know of them.

23 Q. Okay. And I want to give you Oak Tree Exhibit 12,  
24 which is the Burns & McDonnell report from March 29,  
25 2011.

1           Are you familiar with this document, Mr. LaFave?

2       A.    Yes.  I've seen this document before.

3       Q.    Now would you agree with me that on page 1 of this  
4       document Burns & McDonnell evaluated alternatives to the  
5       Big Stone plant, and specifically they were Big Stone  
6       plant with air quality control system, Big Stone plant  
7       retrofitted to burn natural gas, a combined cycle plant  
8       to replace Big Stone, and a combined cycle plant with  
9       wind energy purchases to match the BSP energy  
10      production?

11           Do you see that?

12      A.    I do.

13      Q.    Okay.  But Burns & McDonnell never evaluated the  
14      option of market purchases plus the purchase of wind to  
15      replace the output of Big Stone, did it?

16      A.    Not that I'm aware of.

17      Q.    I also wanted to turn you to page 2, which is the  
18      net plant heat rate for the Big Stone facility with air  
19      quality control.  It's at the very bottom.  Do you see  
20      that figure?

21      A.    I do.

22      Q.    What is that figure?

23      A.    10,715 Btu per kilowatt hour -- or kilowatt.

24      Q.    And I wanted to turn to page 6 of 11.  There's a  
25      chart that -- or excuse me.  A table.  Table 2, Economic

1 Modeling Base Case Results.

2 Do you see that?

3 A. I do.

4 Q. Okay. Under -- on the -- there's a heading in  
5 the -- in the row under depreciation and interest basis  
6 energy costs that says Fuel. Am I correct in reading  
7 that as \$40.68?

8 A. That's what it says.

9 Q. Okay. And what was the fuel cost for Big Stone that  
10 you included in your analysis?

11 A. It was the actual fuel cost associated provided by  
12 Mr. Green, and I believe it was 18.50. I don't know what  
13 the cents are.

14 Q. 18.54, subject to check?

15 A. Subject to check. That was the actual results from  
16 2010.

17 Q. Okay. On page 2 of your November 28 testimony,  
18 which would be your response testimony, on line 3 you say  
19 "Costs presented by Otter Tail in the filing referenced  
20 by Mr. Lauckhart do not represent to the cost to  
21 NorthWestern customers for the Big Stone upgrade."

22 Do you see that? It's on page 2 of your response  
23 testimony starting at line 3 and continuing on to line 5.

24 A. I do.

25 Q. Okay. But you don't know sitting here today what

1 those costs are or are going to be, do you?

2 A. I do not know but we have a general range and they  
3 are going to be -- they are not -- well, two things.  
4 Otter Tail costs are not NorthWestern's costs.

5 Q. I would agree with that.

6 A. And this Burns & McDonnell report was based on  
7 Otter Tail so they are going to be different. But based  
8 on a quick calculation, the range is going to be  
9 significantly lower than the \$74.

10 Q. Does that information appear anywhere in this  
11 record?

12 A. It does not.

13 Q. Is it anywhere in the Big Stone proceeding?

14 A. No, it is not. NorthWestern has not filed a  
15 proceeding on Big Stone.

16 Q. I acknowledge that, but you're an Intervener in the  
17 Otter Tail proceeding; correct?

18 A. Correct.

19 Q. And, as far as you know, NorthWestern's calculation  
20 of what it's going to cost to do the environmental  
21 retrofits for Big Stone is not presently in --

22 A. As far as I know. I'm not part of that proceeding.

23 Q. So do you know whether the agreement with Otter Tail  
24 says that NorthWestern is going to pay its pro rata share  
25 of the costs, whatever they are?

1 A. I do not know what the terms of that agreement are  
2 but -- well, I don't want to conjecture. I would say  
3 that would be normal assumption.

4 Q. Okay. So is it true that any costs for a plant that  
5 needs to be retrofitted but is not yet retrofitted and is  
6 not subject to a Commission Order is still avoidable?

7 A. Depending on what you're relating to, but I would  
8 say yes.

9 Q. Okay. And just to make sure that I'm understanding  
10 your position, you're not saying that the reason Big  
11 Stone isn't avoidable is because of its sunk costs; is  
12 that correct?

13 A. I don't believe so.

14 Q. I know that was phrased kind of weird. I think I  
15 did a double negative. Sorry about that. Let me  
16 rephrase it.

17 So is the reason that you are saying that Big Stone  
18 is not an avoidable resource is because of the sunk costs  
19 that are already in your rate base?

20 A. What I'm saying is the reason why under this docket  
21 the Big Stone property is not an avoidable resource is  
22 it is not costs NorthWestern can avoid associated with  
23 buying capacity energy from Oak Tree.

24 Q. Okay. So but an avoided cost can include fixed  
25 costs; correct?

1 A. If the fixed costs can actually be avoided.

2 Q. Right.

3 A. By the displacement of the power or capacity.

4 Q. Right. On page 2, lines 22 through 23 you state  
5 that Mr. Lauckhart's statement that NorthWestern used the  
6 differential revenue requirement model in the Spion Kop  
7 proceeding is false; is that correct?

8 A. That is correct.

9 Q. Okay. And I'm going to refresh your recollection.  
10 I asked you specifically about the Spion Kop proceeding  
11 in March of 2012, and your response was you weren't  
12 paying that close of attention because you were focusing  
13 on your own testimony.

14 Do you recall that?

15 A. I do.

16 Q. Okay. So how do you know whether or not  
17 Mr. Goldseth use the differential revenue requirement?

18 A. I asked Mr. Goldseth.

19 Q. Okay. And he said he didn't?

20 A. He said he did not.

21 MR. UDA: If you could just give us a moment, we  
22 have to dig something out.

23 MR. SMITH: Sure.

24 Q. So let me ask you this: Maybe we're just having a  
25 terminology dispute. Do you know whether or not what



1 Mr. Goldseth did was he took and put the Spion Kop  
2 project into NorthWestern's revenue requirement and then  
3 later took it out and then compared the overall cost  
4 based on that analysis?

5 A. What Mr. Goldseth said is hearsay. What he told me  
6 was he did not do that for this docket, but in a -- and I  
7 don't even know which piece and he didn't use Spion Kop  
8 specifically, but he was doing it for planning for wind.

9 Q. Okay.

10 MR. UDA: Do you guys still have a copy of  
11 Mr. Lauckhart's direct testimony? Or his rebuttal  
12 testimony?

13 Maybe this would be more profitable.

14 Q. Does it refresh your recollection that Mr. Goldseth  
15 said comparing the May 2011 tracker costs without  
16 Spion Kop to the May 2011 tracker costs including  
17 Spion Kop market purchase costs decreased by an estimated  
18 \$70 a megawatt hour as a result of Spion Kop's energy  
19 production?

20 MR. BROGAN: Mr. Smith, I'm going to object.  
21 Partially on the grounds of relevance. Partially on the  
22 grounds of hearsay.

23 MR. UDA: Okay. Well, first of all, this is in  
24 Mr. Lauckhart's rebuttal testimony. It's already an  
25 exhibit in the case. And so it can't be hearsay because

1 it's already been admitted into the record and is part of  
2 Mr. Lauckhart's testimony and part of his expert  
3 opinion.

4 Second of all, on relevance grounds, he said --  
5 this witness said that that's not what Mr. Goldseth did.  
6 I'm reading what Mr. Goldseth said he did. I don't  
7 understand how that can not be relevant.

8 MR. SMITH: I'm going to overrule the  
9 objection.

10 Q. So the question was posed to you does that refresh  
11 your recollection about what Mr. Goldseth actually did?

12 A. I asked Mr. Goldseth if he used what Mr. Lauckhart  
13 identified, and he said no. As far as recollection on  
14 what you're referring to, I can't answer those  
15 questions.

16 Q. Okay. So is it possible that what's going on here  
17 is just a language difference? You just don't call it a  
18 differential revenue requirement model?

19 A. No. Because my understanding of how Spion Kop is  
20 evaluated -- and I don't even know -- I guess I don't  
21 even know what docket you're referring to.

22 Q. 2011-541 in Montana in which you testified.

23 A. So that was a Spion Kop docket?

24 Q. That's right.

25 A. Okay. As what's described by Mr. Lauckhart, I don't

1 ever remember seeing anything like that. But again  
2 that's not my expertise so I can't tell you.

3 Q. Okay. But you would agree with me that whatever  
4 Mr. Goldseth said he did is what he did?

5 A. Yes.

6 Q. Okay. And we should be able to rely on  
7 Mr. Goldseth's testimony, would you agree with me?

8 A. And the file price that was filed with the docket.

9 Q. So when you say that what Mr. Lauckhart said was  
10 false, you might be incorrect about that; is that true?

11 A. Based on what I was told by Mr. Goldseth, I would  
12 say no.

13 Q. Okay. Do you know whether or not NorthWestern used  
14 the GenTrader model in the Spion Kop proceeding?

15 A. I do not know.

16 Q. On page 3, line 8 of your testimony you were asked  
17 what the value of RECs should be in South Dakota. And  
18 you say zero. So from that I am assuming you're okay  
19 with Oak Tree keeping the value of the RECs.

20 A. I would say yes.

21 Q. Okay. On page 3, line 14 of the same testimony, you  
22 say that Mr. Lauckhart is double counting capacity in his  
23 calculations.

24 On what basis do you say Mr. Lauckhart is double  
25 counting capacity?

1 A. When we first read Mr. Lauckhart's -- I heard this  
2 question come up earlier. When we first read  
3 Mr. Lauckhart's testimony we saw the table that was --  
4 and I don't have his testimony but the table that was  
5 referenced in my response on 1517 and in there was  
6 capacity.

7 And then following that there was a capacity  
8 calculation that they were also collecting a little over  
9 500,000. The assumption was that they were after both.  
10 After hearing Mr. Lauckhart's answer this morning, the  
11 table is the final price.

12 Q. Right. He's just rolling the capacity cost payment  
13 into the total payment.

14 A. Correct.

15 Q. Now I wanted to ask you about something you said on  
16 page 4, line 13, about the new world of shale gas. Is it  
17 correct to say that prior to the EIA early release of  
18 2011, in that reference case, that EIA had been tracking  
19 shale gas in prior EIA forecasts?

20 A. I could not tell you for sure.

21 Q. Okay.

22 A. I would assume they would track any activity within  
23 the gas production.

24 Q. Okay. I want to use Exhibit 14, which is the AEO  
25 2011 Early Release. I don't know that we've introduced

1 this yet.

2 MR. SMITH: No. That has not been introduced.  
3 You also at some point, remember, 17 has not been  
4 admitted.

5 MR. UDA: Yes. I remember. But thank you for  
6 reminding me.

7 Q. I want to specifically refer you to the second full  
8 paragraph. It starts with the sentence that says "A  
9 higher updated estimate of domestic shale gas resources  
10 supports increased natural gas production prices below  
11 those in last year's outlook."

12 Do you see that?

13 A. Yep.

14 Q. Could you please read the sentence that starts with  
15 "The technically recoverable unproved shale gas  
16 resource"?

17 A. "The technically recoverable unproved shale gas  
18 resource is 827 trillion cubic feet (as of January 1,  
19 2009) in the AEO 2011 reference case, 480 trillion cubic  
20 feet larger than the Annual Energy Outlook 2010 (AEO  
21 2010) reference case, reflecting additional information  
22 that has become available with more drilling activity in  
23 new and existing shale plays. The larger resource leads  
24 to about double the shale gas production and over 20  
25 percent higher total lower 48 natural gas production in

1 2035, with lower natural gas prices than was projected in  
2 the AEO 2010 reference case."

3 Q. Okay. Would you agree with me that what this  
4 essentially says is that they've increased the amount of  
5 technically recoverable unproved shale gas resources from  
6 their last report?

7 A. Yes.

8 Q. So they were tracking it before the EIA 2011 Early  
9 Release?

10 A. Yes.

11 Q. Okay. Does technically recoverable shale gas mean  
12 economically recoverable shale gas?

13 A. It can, and it can't. It could be both.

14 Q. Okay. But like, for example, you could drill to the  
15 earth's core looking for shale gas and there might be  
16 some there, but it wouldn't be economically prudent to  
17 pursue it, would it?

18 A. No.

19 Q. I want you to turn to page 2 of EIA early release,  
20 the part that says Introduction. And there's a sentence  
21 that says -- it starts with "Because of the  
22 uncertainties."

23 Do you see that?

24 A. Which paragraph?

25 Q. It's the first full paragraph on page 2.

1 A. Okay.

2 Q. It says "Because of the uncertainties." Do you see  
3 that?

4 A. Yep.

5 Q. Okay. Could you read those two sentences into the  
6 record, please.

7 A. "Because of the uncertainties inherent in any energy  
8 market projection, the reference case result should not  
9 be viewed in isolation. Readers are encouraged to view  
10 the alternative cases when the complete AEO 2011  
11 publication is released in order to gain perspective on  
12 how the variations and key assumptions can lead to  
13 different outlooks for the energy markets."

14 Q. Let me ask you this: In your opinion, is this the  
15 EIA telling you to be careful about relying on the EIA  
16 2011 Early Release?

17 A. Yes. But it doesn't point back to the 2010 release.

18 Q. Was the information in the EIA 2011 Early Release  
19 report available to Burns & McDonnell when they prepared  
20 the report in March of 2011?

21 A. Yes.

22 Q. Okay. Now on page 4, line 18 of your responsive  
23 testimony you state that the decision to upgrade Big  
24 Stone was made after the date of the LEO, and this is on  
25 page 4, line 18?

1 A. Correct.

2 Q. Okay. Considering that the Burns & McDonnell report  
3 was prepared in March of 2011, wasn't NorthWestern -- in  
4 fact, all the co-owners at Big Stone -- aware of the  
5 potential need to upgrade Big Stone before February 25,  
6 2011?

7 A. Yes.

8 Q. On page 4, line 26 you seem to be stating that  
9 Oak Tree somehow inflated the cost of the combined cycle  
10 turbine; is that correct?

11 A. What I'm saying is artificially inflating costs for  
12 the construction of a combined cycle combustion turbine  
13 and then utilizing that inflated cost to justify a  
14 construction of QF project would not be applicable.

15 Q. Right. But didn't Mr. Lauckhart just rely on the  
16 report by Burns & McDonnell in calculating what the cost  
17 for the combined cycle combustion turbine would be?

18 A. Again, the costs associated with the Burns &  
19 McDonnell report are not reflective of the costs  
20 associated with NorthWestern or its customers.

21 Q. Okay. Wasn't Burns & McDonnell a consultant to the  
22 co-owners of the project?

23 A. Primarily for Otter Tail, yes.

24 Q. On page 5, line 1 of that same testimony there's a  
25 question that says Do you agree that NorthWestern's



1 avoided cost of 69.30 per megawatt hour as estimated by  
2 Mr. Lauckhart is accurate?" And you say that  
3 "Mr. Lauckhart's calculation is erroneous because it  
4 relies on unknown environmental and regulatory  
5 requirements."

6 Do you see that?

7 A. It says that the factors based on several erroneous  
8 factors.

9 Q. Okay. Included among them are unknown environmental  
10 and regulatory requirements. Do you see that?

11 A. Correct.

12 Q. Okay. What unknown and regulatory requirements did  
13 Mr. Lauckhart erroneously rely on?

14 A. The utilization of -- I'm looking at Mr. Lauckhart's  
15 testimony, page 16-2 of 2 through 10. The factors would  
16 be the EIA forecast that he utilized, assuming that the  
17 Big Stone plant modifications would be avoidable through  
18 the -- if we have a purchase of Oak Tree power or  
19 capacity.

20 Also the use of a comparison of a -- of an average  
21 from comparisons like Spion Kop where the price was  
22 listed as 74 has clearly been filed at just above \$50.  
23 The utilization of a REC cost that is for a REC market  
24 that doesn't exist in South Dakota, the utilization of a  
25 capacity cost that's significantly higher than the

1 capacity that NorthWestern could avoid by entering into a  
2 contract with Oak Tree.

3 It's pointing out that there are several factors and  
4 assumptions made in that total calculation in order to  
5 come up with a levelized cost of 64.90.

6 Q. Okay. But I didn't hear in there unknown  
7 environmental and regulatory requirements. What  
8 specifically are you referring to?

9 A. There was a -- I apologize. I didn't reference it  
10 in my docket. But there was a comment --

11 Q. Maybe this would help. Is there a specific case  
12 that Mr. Lauckhart looked at that you're referring to?

13 A. There was a summary on how -- I'm trying to find it.  
14 It was -- this is the -- the rebuttal was a comment back  
15 to an earlier summary also. And it talked about  
16 adjustments made in the forecast for environmental and  
17 regulatory -- and I'm trying to find the specific word.  
18 It's within one of these questions to his energy  
19 forecast.

20 Q. Maybe we can just cut to the chase. So you're  
21 familiar with what Mr. Lauckhart did; right?

22 A. Referring to what?

23 Q. Well, in terms of preparing that avoided cost of  
24 69.30?

25 A. My understanding is he took the average of the

1 10 things on the chart.

2 Q. Right. And I think six or seven of them were EIA  
3 AEO forecasts for either 2010 or 2011; right?

4 A. A very select subset of that report, yes.

5 Q. Okay. And then he took the cost, what he claimed to  
6 be the cost, of Big Stone, the cost of Aberdeen?

7 A. Which is incorrect.

8 Q. And the cost of Spion Kop?

9 A. Which is incorrect.

10 Q. We can argue about whether he's correct or not. I'm  
11 just saying that's what he did.

12 A. Okay.

13 Q. Okay. So where in there is any incorrect  
14 environmental or regulatory requirement?

15 (Pause)

16 Q. Well, maybe in the interest of saving time, we can  
17 move on. And if you can think of it later --

18 A. I'll have to find it. It's in the document. It was  
19 in his energy forecast.

20 Q. And I also know that it's hard to find things  
21 sometimes when you're up on the stand.

22 A. Okay.

23 Q. Let's turn to page 5, line 27. You state that you  
24 agree with using a 12.9 percent capacity assignment to  
25 Oak Tree as testified by Mr. Rounds.

1 Do you see that?

2 A. Yep.

3 Q. Okay. And did you review the MISO document that  
4 Mr. Rounds linked on page 2 of his testimony?

5 A. I did.

6 Q. Okay. And you agree that the document he's relying  
7 upon is essentially an average of 129 different wind  
8 plants throughout the entire MISO region?

9 A. I believe it is the average. I can't testify to how  
10 many points are on it.

11 Q. Okay. Would you agree that they range from  
12 2 percent capacity contribution to 32 percent?

13 A. For that given year, yes.

14 Q. Okay. Okay. I would like you to turn to  
15 Mr. Lauckhart's testimony in his first exhibit, the MISO  
16 Business Practice Manual.

17 A. What number?

18 Q. Oh. 10. And there's a page 4-9 at the bottom.

19 A. 4 of 9?

20 Q. Yeah. It says 4-9. And my question to you is do  
21 you know if any of those 129 was the Titan Wind Project?

22 A. I would not.

23 Q. Okay. All right. Okay. It seems to be on the same  
24 document there is a sentence that begins at the top of  
25 that page, the first full paragraph on that page that

1 begins with "MISO calculates."

2 Do you see that?

3 A. Yep.

4 Q. Could you read down to the -- down to 1, 2, 3  
5 sentences down?

6 MR. BROGAN: Excuse me. Before we go on,  
7 Mr. Uda, would you refer again to the page numbers? Some  
8 of us have gotten lost.

9 MR. UDA: Yeah. It's page 4-9. It's Exhibit 1  
10 to Mr. Lauckhart's responsive testimony, which is OTE 10.

11 Are we there?

12 Q. So you see the sentence I'm referring to MISO  
13 calculates?

14 A. Uh-huh.

15 Q. Could you read down to the part where it says  
16 Results. I think it's three full sentences.

17 A. Okay. "MISO calculates specific wind capacity  
18 credits for each wind farm and applies it to the  
19 registered maximum capability in a commercial model or  
20 its registered capacity through the LMR or external  
21 resource registration process. The wind capacity credit  
22 is allocated to each wind farm based on its capacity  
23 value at each of the MISO's highest coincidental peaks  
24 that occur during the summer. The LOLE study report  
25 includes analysis and results."

1 Q. So based on that understanding, is MISO assigning an  
2 average to wind generators that it's performing this  
3 calculation for?

4 A. Not with historical production, no.

5 Q. I'm not sure I understood that.

6 A. The way I read this or the way I understand this is  
7 once you have a production that can be calculated, they  
8 do the calculation based on the concurrent peaks. This  
9 is after the fact.

10 Q. Okay. Right. But is there anything in there about  
11 them calculating, for example, averaging the average  
12 MISO production into the particular factor for each  
13 project?

14 A. I couldn't tell you what this report has, but my  
15 understanding the utilization of the 12.9 percent for  
16 2012 planning year is for new production of wind, and  
17 it's customary and normal for them to use that for the  
18 first year and then after that you use historical -- you  
19 use either historical or some other data. Exactly how  
20 they do that, I don't know.

21 Q. But that's not your proposal in this case?

22 A. Our proposal is what Green provided, and it seems  
23 very reasonable.

24 Q. Okay.

25 A. The reason why the 12.9 is used is it's effective of

1 the docket with the LEO that was established for 2012.

2 Q. And Mr. Green testified this morning that it was now  
3 up to 13.3 percent; correct?

4 A. It would depend on whatever start year for the  
5 production facility.

6 Q. Okay. And you would also agree with me that within  
7 the particular region in which the Oak Tree facility  
8 will be operating MISO calculated it was an average of  
9 15 percent for those projects; is that correct?

10 A. Whatever Mr. Green testified to, yes.

11 MR. UDA: I'm sorry. I'm just skipping over  
12 questions I already asked Mr. Green. I didn't know what  
13 order the witnesses were going to be called in.

14 Q. Okay. You are basing the capacity cost  
15 calculation --

16 MR. UDA: And I don't know if we need to close  
17 the hearing, but there's a specific number that's  
18 associated with that that previously we have been told is  
19 confidential.

20 MR. SMITH: Is that the contract number we're  
21 talking about?

22 MR. UDA: Yes.

23 MR. SMITH: That is confidential. So I suppose  
24 we should do that. Does Mr. Makens, does he have a -- is  
25 he under a protective agreement or anything?

1 MR. BROGAN: Mr. Smith, I believe Mr. Uda signed  
2 a nondisclosure agreement for Oak Tree project. I would  
3 defer to him as to whether that extends to Mr. Makens or  
4 not.

5 And the other thing I would say is do you need  
6 to refer to the actual number?

7 MR. SMITH: I mean, we have it so we know what  
8 it is, you know. But if you need to refer to it, we're  
9 definitely going to have to turn off the internet but I  
10 don't know --

11 MR. UDA: I don't know that I need to refer to  
12 it. I want to refer to it.

13 THE WITNESS: I'm going to have to explain it.

14 MR. SMITH: Okay. Well, in that case is --  
15 Mr. Makens on the phone, is he subject to the protective  
16 order? Otherwise, we're going to have to turn off the  
17 phone and --

18 MR. UDA: I practice in so many different  
19 jurisdictions I can't remember how people apply this  
20 confidentiality thing. But he's part of the Oak Tree  
21 project. I don't know if that means he's -- she says,  
22 yes, he is subject to the protective order so I will  
23 defer to my co-counsel.

24 MR. SMITH: He is subject to the protective  
25 order?



1 MR. MAKENS: And I would agree to be.

2 MR. UDA: It might just make it easier if we  
3 don't have to worry about it.

4 MR. SMITH: Well, we're going to have to punch  
5 off the internet, though. Because the whole world could  
6 be on there. We know they are. There are probably media  
7 people on there.

8 MR. UDA: I am now really nervous.

9 MR. SMITH: I'd go off the internet, yes.

10 MR. UDA: I promise I'll complete this as  
11 quickly as I can.

12 (The following portion of the transcript is confidential)

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1 Q. [REDACTED]  
2 [REDACTED]  
3 [REDACTED]  
4 [REDACTED]  
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6 [REDACTED] [REDACTED]  
7 [REDACTED] [REDACTED]  
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1 (Reporter reads back the last question and answer)

2 A. I found it.

3 Q. Is that what it is?

4 A. Yeah. It's a thick pile.

5 Q. All right. I'm going to change subject matters and  
6 talk to you a bit about the hybrid methodology. And I  
7 wanted to understand again about the division of  
8 responsibility in preparing this hybrid methodology  
9 forecast you prepared in this proceeding.

10 And my understanding based on what I talked to with  
11 Mr. Green this morning was that he provided you with --  
12 essentially with the load and generation input data; is  
13 that correct?

14 A. Correct.

15 Q. And then Mr. Lewis provided you with the electric  
16 price forecast for using in the hours when the coal  
17 plants weren't operating?

18 A. When the coal plants were not meeting 100 percent of  
19 the load, correct.

20 Q. Right. Now let me ask you about this: In your  
21 prior testimony in January of 2012 did you use hourly  
22 loads in that calculation?

23 A. Yes.

24 Q. Okay. And you used hourly loads in this  
25 calculation?



1 A. Yes. And the first model only represented five  
2 years with estimations after that. And this model was  
3 20 years.

4 Q. I think Mr. Green made that point this morning. And  
5 in the January 2012 forecast you used hourly generation  
6 data; is that correct?

7 A. For those five years, yeah.

8 Q. Okay. And then you just estimated --

9 A. Well --

10 Q. I think that's what Mr. Green said this morning.

11 A. Yeah. I'll have to default to Mr. Green. Because I  
12 use the blend rates.

13 Q. Okay. And in this particular forecast you used the  
14 average load instead of the -- I mean, the average  
15 generation instead of the hourly generation; is that  
16 correct?

17 A. That is correct.

18 Q. Okay. Now is it the case that when you use the  
19 average generation that's available that in hours where  
20 you have very low demand it can appear as though you're  
21 not operating -- that you're operating your coal plants  
22 at a much higher level than you would otherwise be  
23 operating them?

24 A. I would think the reverse would be true.

25 Q. Okay. Explain that to me.

1 A. Just using the average is one piece, but a lot of  
2 what goes into that average availability is based on when  
3 you do planned outages there are also unplanned outages  
4 but a lot of the planned outages are done in the shoulder  
5 months where you don't have those peaks so there are less  
6 need there.

7 So as you relay it over the whole model if you use  
8 the average, I would actually think it would slightly --  
9 albeit, it would be really hard to tell either way, but  
10 it would slightly increase.

11 Q. Okay. Why couldn't you just use the hourly  
12 generation inputs?

13 A. Hourly general inputs vary every year.

14 Q. Right. So do loads.

15 A. Right.

16 Q. You use those.

17 A. We use those loads escalated over the years, yes.

18 Q. Right. And could you have used the actual hour  
19 generation with the actual hourly load and paired those  
20 for the purposes of this forecast?

21 A. We could have, yes.

22 Q. And when you do maintenance on your coal plants do  
23 you typically do it in light load hours, for example, in  
24 May?

25 A. We are not the operator, but typically my

1 understanding is yes.

2 Q. Okay. And you have -- like you talked about  
3 earlier, you will have scheduled and forced outages,  
4 correct, over that period of time?

5 A. Correct.

6 Q. Are these somehow accounted for in this average  
7 analysis that you prepared?

8 A. They are. Well, I didn't prepare it, but my  
9 understanding -- and, again, it's a question you asked  
10 Mr. Green, but my understanding is that's the historical  
11 average of the availability of those plants.

12 Q. Okay.

13 A. If you used a single year generation there could be  
14 arguments to whether or not the plants were unusually  
15 available or whatever.

16 Q. Okay. Do you know whether or not the contract with  
17 the Titan Wind Project has a variable cost every year, or  
18 is it a partially levelized cost?

19 A. My understanding, the Titan contract escalates every  
20 year. Built into that number, I can't tell you.

21 Q. Okay. But don't they just take a first-year number  
22 and just add an inflation escalator to it?

23 A. I can't -- I wasn't part of that contract. But I  
24 would -- it would appear so.

25 Q. Okay. So you were -- are you gravely concerned

1 about the risk posed by the Titan project because it has  
2 a partially levelized rate?

3 A. I don't think I confirmed there was a levelized rate  
4 in it.

5 Q. Okay. Well, subject to check, I mean, it's a number  
6 that's escalated annually.

7 A. Right.

8 Q. And it's escalated by 2 and a half percent annually;  
9 correct?

10 A. Yes.

11 Q. Okay. Are you concerned about that kind of  
12 escalation in a contract posing risk for rate payers?

13 A. Yes.

14 Q. Okay. But you entered into that agreement with  
15 Titan anyway?

16 A. I, again, was not part of entering into that  
17 agreement, but I'm guessing.

18 Q. I mean you, I mean NorthWestern.

19 A. At the time it was the -- based on the forecasts  
20 that were available, it was the right decision.

21 Q. Okay. So do you think that having a partially  
22 levelized rate for Oak Tree would be a manageable risk?

23 A. I would believe a levelized rate would be -- would  
24 be a risk.

25 Q. What about if it were --

1 A. According to Mr. Rounds' testimony, partially  
2 levelized, I suppose it depends on how you do it whether  
3 or not it mitigates that risk or not.

4 Q. But, I mean, is there in theory a way to achieve a  
5 partially levelized rate that would protect rate payers?

6 A. It would be better than a levelized rate, yes.

7 Q. Okay. And as I was saying earlier, my understanding  
8 of the theory is that in the early years of the contract  
9 because the levelized rate may lock in a rate that's  
10 above the actual avoided cost of the utility for that  
11 period of time, the utility owners -- or excuse me. The  
12 QF owners are getting all the gravy in the early years  
13 and then in the outer years comes the pain and they're  
14 actually below avoided cost and there's a risk because  
15 they might not perform the whole contract.

16 Is that your understanding?

17 A. Yeah. That, as identified in Mr. Rounds' testimony.

18 Q. Is another way to manage that problem through a  
19 security requirement?

20 A. Yeah.

21 Q. Is that something that NorthWestern would be open  
22 to?

23 A. Yeah.

24 Q. Okay.

25 A. I would think that would be a lot harder to discuss.

1 Security is usually a complex --

2 MR. UDA: I'm going to give -- does the witness  
3 have Exhibit 17?

4 THE WITNESS: Yeah. I have them in front of me.

5 Q. Okay. Now I asked Mr. Green about this this  
6 morning. And it's Exhibit 17, Oak Tree. And it has some  
7 comparison of the amount of NorthWestern's load that will  
8 be served for market both from your January 2012  
9 testimony to your November 21, 2012 testimony.

10 And the main question I want to ask you is, is the  
11 main difference between the two calculations that  
12 produced this result the fact you didn't use hourly  
13 generation in the November 21, 2012, calculation but you  
14 did use it in the January 2012 calculation?

15 A. No.

16 Q. Okay. What is the main difference between the --  
17 these two columns of numbers?

18 A. In the January calculation, reverting back to my  
19 testimony that we only had five years in the model, which  
20 acts like the model that we used just recently, which has  
21 20 years.

22 In the January model we had five years. We used a  
23 load duration curve, which is a very rough tool to  
24 estimate when we thought we'd be 100 percent of the  
25 market.

1           And in that testimony in that hearing I testified  
2           that I seriously doubt we'd be 100 percent in the market  
3           by 2023, but we were looking for a rough estimate.

4           We estimated so you can see in this table after 2023  
5           it says 100 percent. To bridge the gap between the last  
6           year of the model, which was 2016 and 2023, did just a  
7           linear interpolation, again, to give us an estimate for a  
8           20-year cost. But that was based on only five years of  
9           the model.

10           What NorthWestern did for this hearing is went back  
11           and created an actual model that reflects NorthWestern's  
12           load, NorthWestern's generation, and ran it out for  
13           20 years. And it showed what I relayed to, that we would  
14           not be 100 in the market by 2023, and we probably won't  
15           be at 100 percent in the market during my career.

16           Q.    Okay. But is one of the differences between January  
17           2012 and November 21, 2012, that you didn't use actual  
18           hourly generation figures in the November 21, 2012,  
19           calculation and you did use it in January of 2012?

20           A.    That is a difference.

21           Q.    Okay. So have you done an analysis to determine how  
22           much of a factor that played in the differences of these  
23           columns?

24           A.    We did not.

25                   MR. UDA: I think I'm just about finished.

1 Q. So I think I just have one general question based  
2 again on this Exhibit 17. And I'm assuming that in both  
3 of these analyses, including the November 21, 2012, that  
4 you're assuming that Big Stone and Neal will continue to  
5 operate past 2016; is that correct?

6 A. That is correct.

7 Q. Okay. And I'm also assuming that in the load  
8 calculation that you prepared, I assume you were present  
9 for Mr. Green's testimony this morning?

10 A. I was.

11 Q. Okay. And I also assume that in this calculation  
12 you did not include any wholesale load for NorthWestern.  
13 This just excludes its residential load numbers; is that  
14 correct?

15 A. We don't have wholesale load.

16 Q. Okay.

17 A. I believe that's what Mr. Green testified to this  
18 morning.

19 MR. UDA: Okay. I need to move for the  
20 admission of 11, 12, 14, 16, 17, and that's it.

21 MR. SMITH: Did you say 16 too?

22 MR. UDA: Yes.

23 MR. SMITH: Is there objection?

24 MR. BROGAN: Yes. May we take them one at a  
25 time?



1           MR. SMITH: Is there one or two that you object  
2 to but not others?

3           MR. BROGAN: There are only a couple that I  
4 object to.

5           MR. SMITH: Which are those?

6           MR. BROGAN: I'm going to object to the  
7 admission of OT 12.

8           MR. SMITH: Okay.

9           MR. BROGAN: OT 12 is a letter from a Mr. --  
10 I'm assuming it's pronounced Greig and a Mr. Kopp to  
11 Mr. Rolfes at Otter Tail Power Corporation.

12                   First off, this letter is hearsay. It's being  
13 offered -- basically it's a statement by Mr. Greig and  
14 Mr. Kopp. It's being offered to the truth in it to  
15 establish costs of alternatives to Big Stone and also the  
16 cost of Big Stone. We've had no opportunity to  
17 cross-examine Mr. Greig or Mr. Kopp.

18                   Secondly, I do not believe that a foundation has  
19 been laid for admission of this. And so, therefore, I  
20 would object to the admission of OT 12.

21           MR. SMITH: Okay. And is there another one as  
22 well, Al, that you object to?

23           MR. BROGAN: I would -- I would ask Mr. Uda to  
24 explain to me exactly where in Exhibit 1 to Mr. LaFave's  
25 November 21 testimony he found these percentages that

1 he -- is presented on the chart in OT 17.

2 MR. UDA: I didn't personally prepare that so  
3 I'm not really in a position to answer it. But I believe  
4 the numbers were derived directly from Mr. LaFave's  
5 testimony. And I don't believe Mr. LaFave thinks those  
6 numbers are inaccurate.

7 MR. BROGAN: Mr. Smith, I would request that you  
8 reserve judgment on OT 17 until after redirect of  
9 Mr. LaFave.

10 MR. SMITH: Is that acceptable?

11 MR. UDA: That's fine with me.

12 MR. SMITH: Okay. Mr. Uda, then do you have a  
13 response with respect to 12?

14 MR. UDA: Well, my first response is that  
15 Mr. Lauckhart relied on the Burns & McDonnell report in  
16 preparing his expert opinion in this case. His cost  
17 analysis of Big Stone comes directly from it the Burns &  
18 McDonnell report.

19 Moreover, I asked Mr. LaFave directly whether or  
20 not he had seen the report before and he was familiar  
21 with it, and I believe his testimony was that he was.  
22 And it's also already in the Commission's files in  
23 EL12-027 proceeding, and I think the Commission can take  
24 judicial notice of it.

25 MR. SMITH: Staff, do you have a position?

1 MS. CREMER: I do. I would agree with  
2 NorthWestern that I would object to the admission of  
3 this.

4 The relevancy here as to the incremental cost of  
5 power for the Big Stone retrofit is not an avoided cost  
6 and, of course, that's why we're here today and  
7 continuing days.

8 A 9.5 megawatt wind farm is not an alternative  
9 to Big Stone. And even if NorthWestern contracted with  
10 Otter Tail -- or Oak Tree, that would not allow the  
11 co-founders -- or the co-owners to avoid retrofitting  
12 Big Stone. I just don't see the nexus here between  
13 these.

14 There's a whole separate docket on this. And I  
15 recall Mr. LaFave's testimony quite a bit being I don't  
16 know in response to questions when it came to this  
17 particular issue. So I would object to its admission.

18 MR. UDA: First of all, I object to counsel's  
19 characterization of Mr. LaFave's answers. I think what  
20 the record will reflect is when I asked Mr. LaFave about  
21 these costs he said he doesn't think they're right, but  
22 he really doesn't know what they are. And my -- and my  
23 objection -- my response to the objection stands.

24 Mr. Lauckhart is an expert. He's allowed to  
25 rely on hearsay testimony, nonetheless. And I haven't

1 heard a response as to why this isn't subject to  
2 administrative notice, considering, as Ms. Cremer says,  
3 it's already in the Commission's files.

4 And I do see a direct relevance between these  
5 two things. I see the Big Stone plant as being an  
6 avoided resource. I may be wrong about that and the  
7 Commission may tell me I'm wrong, but that doesn't make  
8 it any less relevant.

9 MR. SMITH: Again, a suggestion to withhold  
10 judgment on 17, yes.

11 I think with respect to -- now I've got to find  
12 it here.

13 I think with respect to 12 I'm going to overrule  
14 the objection. And, again, we understand that there's an  
15 ultimate issue down the road as to what costs the  
16 Commission will determine are truly avoided. But in  
17 terms of its being so irrelevant as to not even be  
18 considered in connection with that decision, I don't  
19 think that's appropriate in this case.

20 And, again, because the letter is -- I mean,  
21 Otter Tail's the project manager on that, but that  
22 doesn't mean to me that it's irrelevant from a standpoint  
23 of NorthWestern. And I think it's got a sufficient  
24 foundation due to it's an official document that's being  
25 used to justify costs in a proceeding before the

1 Commission.

2           And I think there's sufficient -- you know,  
3 reliability of it, at least as an official project  
4 document to be admitted for our consideration, for the  
5 Commission's consideration in the case. And it will give  
6 NorthWestern a grounds for appeal if it decides to go  
7 that route. So I'm going to admit it and will consider  
8 17 later.

9           Otherwise, I'm going to admit 11, 12, 14, and 17  
10 [sic].

11           MR. BROGAN: Excuse me. 16?

12           MR. SMITH: 16. I'm sorry. Thank you.

13           MR. BROGAN: May I ask one question?

14           Does your ruling also include a ruling that this  
15 is not hearsay?

16           MR. SMITH: I'm saying it might be hearsay, but  
17 I'm finding that it's admissible hearsay in that it's an  
18 official record in the case. And not just that, but it's  
19 a technical document that is being relied upon by the  
20 project manager, not you, but of the Big Stone case of  
21 which you're going to pay part of the cost. And to me I  
22 think that has sufficient basis for us to consider it,  
23 realizing it's just an engineer's letter.

24           And the Commissioners, if they want to overrule  
25 me, they're entitled to do that.

1 MR. BROGAN: Mr. Smith, thank you for answering  
2 that question.

3 MR. SMITH: Are you done then, Mr. Uda?

4 MR. UDA: Yes, Mr. Smith. I'm finished.

5 MR. SMITH: At least for now. And we know we've  
6 got 17 sitting there, you know.

7 MR. UDA: Yeah.

8 MR. SMITH: Okay. I'm going to bring up now  
9 we've been going a long, long time. Should we take a  
10 break before we proceed to redirect? I guess we have  
11 Staff cross first.

12 Staff, do you have any cross-examination?

13 MS. CREMER: We do not. Thank you.

14 MR. SMITH: Okay. Thank you. Well, and I  
15 suppose we have Commissioner questions. Should we take a  
16 break? Would you like to take a before we go to  
17 Commissioner questions?

18 (A short recess is taken)

19 MR. SMITH: I'm going to call the hearing back  
20 to order. We have finished the cross-examination by  
21 Staff and by Oak Tree. And now we'll turn to  
22 Commissioner questions of witness LaFave.

23 Okay. Chairman Nelson.

24 CHAIRMAN NELSON: I'd like to begin -- and  
25 probably one of the big st issues I've got to resolve in

1 my mind as we bring this whole issue to a conclusion  
2 stems from your November 28 testimony, page 6, the second  
3 to the last paragraph where you're comparing your  
4 estimated system load to that that was reported or  
5 estimated by Mr. Rounds. And obviously I'm going to ask  
6 him about that one when it's his opportunity to testify.

7 But I guess the question I'd have for you,  
8 you've indicated here that NorthWestern's forecasted load  
9 for 2012 is 1,660,736 megawatt hours. Where are you at  
10 actually today with 2012? Are you on target for this?  
11 Ahead? Behind?

12 THE WITNESS: We are on target for this. I  
13 can't tell you what 2012 is -- I haven't looked at that  
14 number -- but 2011 was right in line with this. I have  
15 not looked at 2012.

16 CHAIRMAN NELSON: So you don't know -- so we're  
17 very close to the end of the year, and you're telling me  
18 you don't know --

19 THE WITNESS: I haven't looked. I don't produce  
20 those numbers.

21 CHAIRMAN NELSON: Can you give me any idea why  
22 there's a 30 percent discrepancy between your numbers and  
23 Mr. Rounds'? And, obviously, I will ask him also.

24 THE WITNESS: The only thing as I look through  
25 his models -- and I'm unfamiliar with the structure that

1 he used within his modeling, but he has as an example  
2 within his testimony his model's broke down into blocks  
3 of power. And in his top blocks of power of like 300  
4 some megawatts and then he's got another block of --  
5 there's three for four blocks above 300 some megawatts.  
6 And the total hours that NorthWestern was at that level  
7 was somewhere around 200 hours.

8 Under our normal load profile we aren't even  
9 close to 200 hours at that level. So it's very heavy on  
10 the top end in that block analysis. And I think it might  
11 have to do with what I believe Mr. Green discussed  
12 earlier about using the peak load to adjust for your  
13 hourly incremental load rather than using the actual  
14 hourly load.

15 CHAIRMAN NELSON: Thank you. The offer from  
16 Basin for capacity and the dollar value that was  
17 associated with that offer, do you consider that to be a  
18 legitimate offer?

19 THE WITNESS: The existing offer that we had  
20 through Mid-America was -- when you include the  
21 transmission cost was around \$28 a kilowatt year.

22 The offer that we got from Basin, the  
23 preliminary offer, was \$36 a kilowatt year. We settled  
24 on a 5 and 11 over six months, which is -- either a 30 or  
25 a --



1 MR. BROGAN: Excuse me. We may be too late.

2 MR. SMITH: I think we wandered into  
3 confidential material.

4 THE WITNESS: Sorry. I apologize.

5 MR. UDA: Hey, I didn't do this.

6 MR. SMITH: It's your agreement, Bleau. I'm  
7 assuming, do you have a nondisclosure agreement on it or  
8 anything?

9 THE WITNESS: Yes.

10 MR. SMITH: Well, it's too late now but -- are  
11 you going to -- are we going to go on further with this  
12 because we should then go off the internet.

13 CHAIRMAN NELSON: If I might, my question was  
14 the legitimacy of it and I think that can maybe be  
15 explained without the dollar values being associated, but  
16 if you think you need to talk further about those, we can  
17 go off.

18 THE WITNESS: It is in line with the capacity  
19 costs that were finally agreed to. And higher than the  
20 existing contracts at that time.

21 CHAIRMAN NELSON: I think that's all the  
22 questions I have. Thank you.

23 MR. SMITH: Commissioner Hanson? Fiegen? Any  
24 questions, Commissioner Fiegen?

25 COMMISSIONER FIEGEN: No.

1 MR. SMITH: Mr. Rislov.

2 MR. RISLOV: Mr. LaFave, I think they've all  
3 been asked so far, anything I had except for one. And  
4 it's been stated within NorthWestern's case that they  
5 give zero value to RECs.

6 Do you really think it's zero value? Could it  
7 be a quarter? 50 cents? Obviously you don't think it's  
8 7.50, but is there an alternate value that you would put  
9 on RECs?

10 THE WITNESS: I am not -- there obviously could  
11 be a value associated with RECs, but to NorthWestern we  
12 have no requirement for RECs so there is no value to us  
13 at this time.

14 Is there a market for RECs? It's possible, but  
15 I'm not aware of one.

16 MR. RISLOV: And excuse me for not having this  
17 at my fingertips, but how far along is NorthWestern  
18 toward meeting, you know, the 10 percent I'll call it  
19 goal -- it's not a requirement -- that was expressed by  
20 the legislature?

21 THE WITNESS: I believe we're between 5 and 6  
22 percent.

23 MR. RISLOV: Okay. Thank you.

24 MR. SMITH: Mr. Uda? Or Brogan. I was just  
25 looking at him. I'm sorry.

1 MR. UDA: I have that effect on people.

2 MR. SMITH: You do. I tell you what. He's a  
3 charismatic individual. Sorry, Al.

4 MR. BROGAN: I agree he is. I'm just an old  
5 shoe.

6 MR. SMITH: Well. You're talking to a fellow  
7 shoe here. So yeah. Please -- obviously, I'm getting  
8 tired like Cheri.

9 Please, proceed with your redirect.

10 MR. BROGAN: Thank you. I have just a few  
11 questions.

12 REDIRECT EXAMINATION

13 BY MR. BROGAN:

14 Q. Mr. LaFave, do you recall some questions with  
15 respect to Mr. Lauckhart's calculation of capacity and  
16 the fact that he rolled the capacity payment into the  
17 energy price?

18 A. Yes.

19 Q. Is the effect of rolling the capacity payment into  
20 the energy price essentially to fix the capacity credit  
21 for the life of the contract?

22 A. That would be the result.

23 Q. Would you refer to OT 12 for a moment, please. Do  
24 you have it there still?

25 A. I do.

1 Q. Would you read the first sentence of the letter,  
2 please, that starts Burns & McDonnell?

3 A. Sure. "Burns & McDonnell have been retained by  
4 Otter Tail Power to perform a pro forma economic analysis  
5 of the air quality control system proposed to be  
6 installed on the existing Big Stone plant."

7 Q. Is there anything in this document that indicates  
8 that Burns & McDonnell was retained by the co-owners of  
9 Big Stone?

10 A. Not that I'm aware of.

11 Q. Are you aware of NorthWestern retaining Burns &  
12 McDonnell in any way?

13 A. Not that I'm aware of.

14 Q. Do you recall questions with respect to how MISO  
15 determines capacity credit for wind farms?

16 A. Yes, I do.

17 Q. And do you recall Mr. Uda, if I'm not misstating his  
18 question or misstating the import of his question, to in  
19 his question suggest that MISO does not use a system  
20 average for wind farms?

21 A. I do remember him making that statement.

22 Q. Would you refer again to exhibit -- to  
23 Mr. Lauckhart's Exhibit 2, MISO Resource Adequacy  
24 Business Practices Manual. And, again, to page 4-9 that  
25 Mr. Uda was asking you about.

1 A. Okay.

2 Q. You read part of a paragraph. I believe it was  
3 4.5.2.1, but I don't see that. Is that the correct  
4 paragraph you read? Or part of it?

5 A. Correct.

6 Q. Would you also read the sentence at the bottom of  
7 the paragraph that starts "A wind farm that does not"?

8 A. Sure. "A wind farm that does not have any  
9 commercial operation history will receive a wind capacity  
10 credit equivalent to the system wide wind capacity credit  
11 from the ELCC study for their initial planning year. And  
12 thereafter meter data is will be used to calculate its  
13 future wind farm specific wind capacity credit. If no  
14 meter data is available, then the wind farm with receive  
15 a capacity credit of zero percent."

16 Q. Do you understand the typos in that paragraph to  
17 mean that -- the second one where you said "then the wind  
18 farm with receive" to mean will?

19 A. I do.

20 Q. And there was another one also. Do you understand  
21 the -- after "meter data is will be used" to mean will be  
22 used?

23 A. Yes.

24 Q. Do you understand that sentence to say that for the  
25 first year MISO uses a system wide average?

1 A. Yes, I do.

2 Q. Is that consistent with NorthWestern's proposal in  
3 this docket?

4 A. Yes, it is.

5 Q. And is the difference between NorthWestern's  
6 proposal and what MISO does that after that first year  
7 MISO -- or NorthWestern has proposed to average the MISO  
8 system wide capacity credit from the ELCC study for the  
9 initial year with the actual years until there are five  
10 years?

11 A. That is correct.

12 Q. Do you recall Mr. Uda asking you some questions with  
13 respect to a partially levelized rate?

14 A. I do.

15 Q. What do you understand to be meant by the term  
16 "partially levelized rate"?

17 A. I'm not clear about the term "partially levelized  
18 rate." But I would assume it would mean they would use  
19 a -- they would calculate a -- the actual costs over  
20 20 years, levelize it, and then -- or, I mean, use an  
21 incremental cost to match it. A fixed incremental cost  
22 to match the curve. But I'm not sure.

23 Q. There was a question from Mr. Uda with respect to  
24 the load that you included in the model, and it was a bit  
25 of a compound question. The first part of it was, as I

1 recall, did you include any wholesale load. And you  
2 responded that NorthWestern does not have wholesale  
3 sales; is that correct?

4 A. Yeah. Per Dick's testimony this morning.

5 Q. The second part of Mr. Uda's question was does the  
6 load just include residential load. Did the load that  
7 you used just include residential load?

8 A. The load we used included all of NorthWestern's  
9 load.

10 Q. And would that be just residential?

11 A. No.

12 Q. What other type of load would it have?

13 A. It would be any connected load that we serve  
14 directly. So it would be commercial, industrial.

15 MR. BROGAN: Mr. Smith, before I go to the next  
16 part, I would say that I do not have any objection to the  
17 admission of OT 17 when it comes time for that.

18 MR. SMITH: Okay. Thank you.

19 Q. Mr. LaFave, do you have OT 17 in front of you?

20 A. I do.

21 Q. Do you recall questions from Mr. Uda with respect to  
22 the changes in the percent from market being caused  
23 perhaps by the fact that NorthWestern used an average  
24 generator output as opposed to the hourly generation  
25 output?

1 A. I do recall.

2 Q. And is it correct that you said that could have been  
3 one of the factors?

4 A. It could have been one of the factors, but it could  
5 go up or down.

6 Q. Is one of the factors for the differences  
7 attributable to changes that you made in the model?

8 A. Yes. As I explained earlier, we only had a  
9 five-year model previously and then did estimations to  
10 come up with the rest for an estimated avoided cost. Per  
11 the Commission's order, we were able and had time to  
12 finish the model and provided a 20-year avoided cost.

13 Q. And in providing the 20-year avoided cost, did you  
14 divide the NorthWestern load into on-peak and off-peak  
15 load?

16 A. We did.

17 Q. And is part of the reason for the differences that  
18 we see in OT 17 attributable to the division of load  
19 between peak and off peak?

20 A. It would be. With the estimation we used before, it  
21 moved everything as a group as far as our load growth,  
22 using a model that reflects on peak and off peak.  
23 Obviously, your on peak would be in the market a lot more  
24 than your off peak would be with our base load  
25 generation. And the escalation between those two would



1 be considerably different.

2 Here we use the same load growth, assuming the same  
3 load growth across our company. But if you start out  
4 with a lower number in your off peak, the curves are  
5 going to separate in the future. So it's going to take  
6 longer to get to 100 percent in off-peak loads.

7 MR. BROGAN: Mr. Smith, I have no further  
8 questions.

9 MR. SMITH: Okay. Mr. Uda, do you have any  
10 follow up from Commissioner questions, et cetera?

11 MR. UDA: I think I just have one. And it's not  
12 in response to the Commission's questions. It's in  
13 response to something Mr. Brogan asked Mr. LaFave to  
14 read.

15 MR. SMITH: Do you have an objection?

16 MR. BROGAN: Mr. Smith, no.

17 MR. SMITH: Please proceed.

18 RECROSS-EXAMINATION

19 BY MR. UDA:

20 Q. We have marked as an exhibit OTE 18. 13. Sorry.  
21 Looks like 18 now. I'm sure it will look like 43 later  
22 tonight.

23 This is the Petition of Otter Tail Power company?

24 MR. BROGAN: Mr. Uda, could you explain how this  
25 relates to 4.9?

1           MR. UDA: Well, in the Burns & McDonnell report  
2 you asked him to read a sentence saying that Burns &  
3 McDonnell was hired by Otter Tail, and I'm guessing that  
4 the implication is not NorthWestern has nothing to do  
5 with it.

6           And this is Otter Tail's Petition and I want to  
7 direct the witness to page 5 and there's a list of  
8 options analyzed at the top of that Petition. And then  
9 there's the sentence below.

10 Q. And I wanted to ask Mr. LaFave are you one of the  
11 Big Stone co-owners?

12 A. NorthWestern is, yes.

13 Q. Okay. Does this Petition represent the Big Stone  
14 co-owners have prepared the Burns & McDonnell analysis?

15 A. Where are you at specifically?

16 Q. On the top of page 5.

17 A. Okay. What was the question?

18 Q. The question is doesn't this say this is the result  
19 of the Big Stone co-owners' analysis that the AQCS  
20 project is the most economical option under all analyses  
21 in the base case?

22 A. That's what it says, yes.

23 Q. Right. And it has the same options listed above  
24 that are in the Burns & McDonnell report; correct?

25 A. Correct.

1 MR. UDA: No further questions.

2 MR. SMITH: Staff?

3 MR. UDA: Oh, I need to move the admission of  
4 OTE 17.

5 MR. SMITH: Is there an objection?

6 MR. BROGAN: No.

7 MR. UDA: And 13.

8 MR. BROGAN: There is an objection to 13.

9 MR. SMITH: 17 I think we've already -- oh, no.  
10 We haven't. I forgot. Okay. No objection to 17.

11 Would you like to tell us your objection basis?  
12 I think I already know, but for the record.

13 MR. BROGAN: I will add the one I missed last  
14 time. First I object on the basis of relevance.  
15 Secondly, I object on the basis of hearsay. This is not  
16 a -- and it's not, in my opinion, anything of which the  
17 Commission can take administrative notice.

18 It doesn't necessarily have facts that are not  
19 subject to dispute in it. It's allegations of facts.  
20 And there's no evidence that this is the type of hearsay  
21 that Mr. Lauckhart, you know, relied on. I just do not  
22 think it is appropriate to be admitted.

23 MR. SMITH: Staff.

24 MS. CREMER: Staff would agree with the comments  
25 of NorthWestern as to the admissibility of this. We

1 would object to it. And I can't remember if on  
2 Exhibit 12 if you said it was a public record and that's  
3 why you allowed it in. But I would state that I don't  
4 believe it's a public record. It's not one that by  
5 law -- you know, we the agency did not generate this  
6 Petition. We merely have filed it. And so I don't  
7 believe it's a public record either.

8 Thank you.

9 MR. SMITH: Mr. Uda.

10 MR. UDA: Well, I think if the Commission  
11 follows its prior precedence on the relevance issue, I  
12 think this is an issue not of relevance but of weight.

13 I mean, you can decide that you don't think you  
14 should give the argument much weight. That doesn't make  
15 it not relevant to an issue in the case.

16 The Commission will recall that relevance is  
17 basically the determination whether the fact in dispute  
18 has any tendency to prove or disprove an issue in the  
19 case. We're claiming an issue in the case is  
20 discrimination. I don't see how it's not relevant. So  
21 that's number one.

22 Number two, he doesn't have any idea whether  
23 Mr. Lauckhart relied on it or not. He more or less said  
24 that. In fact, I can put Mr. Lauckhart on the stand and  
25 tell you he did rely on it. That's one of the reasons he

1 chose to use the Burns & McDonnell report; because the  
2 Petition itself says it comes from the co-owners.

3 Third, if they're a co-owner of the plant and  
4 Otter Tail is speaking for them, there's an agency  
5 relationship, and you can presume what they're saying  
6 here is what the co-owners are representing. Now I  
7 understand that NorthWestern doesn't want to admit that  
8 in this proceeding, but that doesn't mean it's not  
9 admissible.

10 And I think my fourth response would be I do  
11 think you can take administrative notice of it because  
12 it's in your files. It's something that's a  
13 representation that's been made.

14 And point of fact, I think there are things that  
15 are not in dispute here. And I think one of them is that  
16 NorthWestern is a co-owner of the Big Stone plant, and  
17 the co-owners of the Big Stone plant supported the Burns  
18 & McDonnell report. And it's in their Petition. So I  
19 guess I don't understand the basis for the objections.

20 MR. SMITH: Mr. Brogan.

21 MR. BROGAN: I would add, if I might, that I  
22 find it surprising that Mr. Lauckhart relied on this  
23 report.

24 As I understand it, our obligation is to  
25 determine NorthWestern's avoided costs as of February 25,

1 2011, and that we're not allowed to look at market  
2 conditions or things that have happened subsequent to  
3 that date. Yet this report is dated March 30, 2012.  
4 That goes to the relevancy.

5 MR. UDA: First of all, I think maybe I'm  
6 misunderstanding. I know the Petition was filed  
7 March 30, 2012, but I believe the Burns & McDonnell  
8 report was filed in March of 2011. And I also think that  
9 this is something that's not exactly a clean issue.

10 But here's how it goes: When you make a  
11 determination of avoided cost over a 20-year period you  
12 start at point one and you ask, well, what resources are  
13 avoidable in that period. And I think that earlier today  
14 we heard testimony that NorthWestern was aware prior to  
15 February 25, 2011, that the Big Stone plant would require  
16 significant upgrades in order to continue operating into  
17 the year 2016.

18 So, again, I'm at a loss to explain the  
19 objections.

20 MR. SMITH: I think, as we did with the earlier  
21 document, I'm going to overrule the objection. To me,  
22 again, it is a question of weight, I think. I mean, is  
23 there any relevancy to this?

24 You know, again, yes, we have a date of  
25 February 25, 2011, but we have several other documents

1 that are -- have been admitted that reference material  
2 that's beyond that date. They've been admitted.

3 And the other thing is just pointing out to the  
4 parties here, generally speaking, the regular Civil Rules  
5 of Evidence pertain in administrative proceedings in  
6 South Dakota. But there is a provision in there in the  
7 Administrative Procedures Act that does allow for a more  
8 liberal standard when it comes to hearsay, et cetera, in  
9 administrative proceedings.

10 Because they presume, unlike a jury, that  
11 Commissioners are better able to judge both what the  
12 applicable weight to give -- the appropriate weight to  
13 give evidence is and should be. And also to judge the  
14 extent to which a particular document is entitled to be  
15 relied on in the hearsay context.

16 And with that, I'm going to admit it, and I  
17 think the Commissioners are capable of giving it the  
18 weight and the credibility that it deserves in this case.  
19 And they can overrule me.

20 So Otter Tail 13 is admitted. Oak Tree. Otter  
21 Tail. OT. OT.

22 With that, anything further, Mr. Brogan?

23 MR. BROGAN: Mr. Smith, no.

24 MR. SMITH: I think that concludes and,  
25 Mr. LaFave, you can step down.

1           Well, it's 5 o'clock now. I think we now have  
2 decision time as to whether proceed with -- does that  
3 conclude your case, your direct case?

4           MR. BROGAN: Mr. Smith, NorthWestern rests its  
5 direct case.

6           MR. SMITH: Okay. And I'm going to get to maybe  
7 call in the Commissioners' opinions.

8           Too, again, we're under some pressure to try to  
9 get this concluded by noon tomorrow because of a couple  
10 of Commissioner conflicts in the afternoon. But what do  
11 you think? I'd appreciate hearing from the parties and  
12 the Commissioners about whether to recess now or forge  
13 ahead.

14           COMMISSIONER HANSON: Can we be off the record?

15           MR. SMITH: Let's go off the record for this.

16                           (Discussion off the record)

17           MR. SMITH: After a discussion off the record  
18 among the parties and Commissioners, we've determined to  
19 recess until 8 o'clock tomorrow morning. So I'd urge  
20 everyone to maybe be here at 10 to 8:00 or so.

21           And, Tina, we can have the room open. And if  
22 you want to get in and you get in -- it wouldn't hurt to  
23 stop in the office and let our admin. people know so they  
24 can come up here and make sure the room is opened up.  
25 Because I know I'm going to leave all my stuff here



1 overnight. Okay?

2 Okay. We're in recess until 8 o'clock tomorrow  
3 morning.

4 (The hearing is in recess at 5:05 p.m.)

5 (The hearing resumes at 8 o'clock a.m., December 6, 2012)

6 MR. SMITH: Good morning, everybody. This is  
7 John Smith, Commission counsel. I'm presiding over the  
8 hearing. Or at least acting as Hearing Examiner, I  
9 should say. And we will call the hearing back to order  
10 in Docket EL11-006, In the matter of the Complaint by  
11 Oak Tree Energy, LLC, against NorthWestern Energy for  
12 refusing to enter into a power purchase agreement.

13 We concluded late yesterday with the conclusion  
14 of NorthWestern's case. And we will now turn to Staff.  
15 And with that I will call on Karen Cremer, counsel for  
16 Staff, to call her first witness.

17 MS. CREMER: Thank you.

18 (The witness is sworn by the court reporter.)

19 DIRECT EXAMINATION

20 BY MS. CREMER:

21 Q. Please state your name for the record.

22 A. Brian Paul Rounds.

23 Q. Have you testified previously in this matter?

24 A. Yes.

25 Q. And have you been present for all the testimony

1 presented thus far?

2 A. Yes.

3 Q. I would direct your attention to what has been  
4 marked as Staff Exhibit 2. I think it's in your  
5 left-hand corner.

6 A. Other left.

7 Q. All right.

8 A. Got it.

9 Q. Is this your prefiled public testimony with 14  
10 attachments that were filed with the Commission on  
11 November 21, 2012?

12 A. Yes.

13 Q. Are you familiar with the contents of your prefiled  
14 testimony and the attachments?

15 A. Yes.

16 Q. At the time your testimony and attachments were  
17 filed was it true and correct to the best of your  
18 knowledge and information?

19 A. Yes.

20 Q. Please summarize the contents of your testimony.

21 A. The purpose of my prefiled testimony was to  
22 determine NorthWestern's avoided cost as of February 25,  
23 2011, using the hybrid methodology as approved by the  
24 Commission.

25 My calculation used both an energy and capacity

1 cost. For the energy cost I looked at two models that I  
2 thought had been vetted by large groups of stakeholders.  
3 The first was EIA's Annual Energy Outlook 2011 Early  
4 Release Reference Case. And the second case -- the  
5 second model was the Eastern Interconnect Planning  
6 Council or EIPC, which I might refer to as EIPC going  
7 forward. It would have been their phase one, business as  
8 usual model, results, and inputs.

9 And using those two models I came up with a market  
10 price forecast for them from 2012 through 2035. After  
11 that I determined NorthWestern's hourly load and Oak  
12 Tree's hourly output. And then by comparing  
13 NorthWestern's hourly load to the maximum generation from  
14 their base load plants was able to determine whether or  
15 not Oak Tree's output at that time should be valued at  
16 the market cost, the generation cost, base load  
17 generation cost, or some mix of the two.

18 For the capacity component I took a value of \$20 per  
19 kilowatt year and a capacity credit of 12.9 percent  
20 across the entire 20 years. And then I converted that  
21 into a dollars per megawatt hour value.

22 In the end I came up with two levelized avoided  
23 costs depending on whether the project would go into  
24 service 2013 or 2014. If in 2013, my number was \$54.32.  
25 If in 2014, my number was \$55.78. But I also caution the

1 Commission to approve a levelized avoided cost in this  
2 case and prefer using the calculated annual costs that I  
3 included in Attachment 1 to Staff Exhibit 2.

4 Q. Have you reviewed the testimony and exhibits filed  
5 on November 21, 2012 on behalf of NorthWestern Energy?

6 A. Yes.

7 Q. And have you reviewed the testimony and exhibits  
8 filed on November 21, 2012 on behalf of Oak Tree?

9 A. Yes.

10 Q. Have you reviewed the testimony and exhibits filed  
11 on November 28, 2012 on behalf of NorthWestern Energy?

12 A. Yes.

13 Q. And have you reviewed the testimony and exhibits  
14 filed on November 28, 2012, on behalf of Oak Tree?

15 A. Yes.

16 Q. Based upon your review of the parties' testimony  
17 filed in November of 2012, do you have any edits to Staff  
18 Exhibit 2?

19 A. Yes. After I filed my testimony, both Oak Tree and  
20 NorthWestern provided some feedback on my analysis. Oak  
21 Tree pointed out that I did not use an inflationary  
22 factor on my capacity cost. And NorthWestern pointed out  
23 that the load shape that I used for NorthWestern overshot  
24 their demand in the near term by about 30 percent.

25 Q. I would direct your attention to what has been

1 marked for identification purposes as Staff Exhibit 3.  
2 Would you explain what this exhibit shows?

3 A. Yeah. Staff Exhibit 3 is what I believe to be the  
4 value of Oak Tree Energy's capacity. When I originally  
5 did this calculation for Exhibit 2 I used the \$20 per  
6 kilowatt year throughout the entire 20-year period.

7 However, in this case I added inflationary rate of  
8 2 and a half percent, which is what I thought  
9 Mr. Lauckhart had used in the original proceeding. Also  
10 I should point out that I reduced the maximum capacity of  
11 Oak Tree from 19 and a half megawatts to 18.915  
12 megawatts.

13 And that is a result of the engineering firm that  
14 Oak Tree used when they filed their FERC Form 1 predicted  
15 losses prior to interconnection of 585 kilowatts. And I  
16 didn't think it was prudent to include those in the  
17 accredited capacity.

18 Q. You thought it was prudent, you said?

19 A. I did not think it was prudent to include those  
20 losses.

21 Q. I would direct your attention to what has been  
22 marked for identification purposes as Staff Exhibit 4.  
23 Would you explain what Staff Exhibit 4 is.

24 A. Staff Exhibit 4 is a map of the regions that EIPC  
25 used in their modeling. In determining NorthWestern's

1 load I used the MAPP\_US Region, as shown in that map.

2 Q. And then I would direct your attention to what has  
3 been marked for identification purposes as Staff  
4 Exhibit 5. Can you explain what that is, please.

5 A. Staff Exhibit 5 is a recalculation of NorthWestern's  
6 load shape using the MISO West or MISO\_W Region as shown  
7 on that map. That's it.

8 Q. Isn't NorthWestern included in the MAPP\_US Region?

9 A. It is.

10 Q. And then can you explain why you would use a  
11 different region?

12 A. Well, as you've seen in Mr. LaFave's testimony, the  
13 load shape that I used for NorthWestern comes out with an  
14 energy demand that exceeded their predicted energy demand  
15 for 2012 by 30 percent. So I'm trying to figure out what  
16 the reason for this was. I tried the MISO\_S load shape,  
17 which I thought would be somewhat similar.

18 However, it turned out that the MISO\_S load shape  
19 only overshoot it by about 7 percent.

20 Q. Can you go on to explain why you think it would be  
21 reasonable?

22 A. Yeah. You know, if you look at the MAPP\_US Region  
23 on the map, Exhibit 4, you'll notice that it's basically  
24 what we consider to be the integrated system. And what  
25 that means is it's made up of -- its retail level,

1 basically cooperatives, municipalities, and NorthWestern.

2 The MISO West Region, on the other hand, is the  
3 western portion of MISO. It includes much more populated  
4 areas, but also includes investor-owned utilities such as  
5 MDU, Otter Tail Power, MidAmerican, and Xcel.

6 And when I started comparing the two load shapes  
7 between MAPP\_US and MISO West, what I noticed was in the  
8 shoulder years and winter years the load factor was quite  
9 a bit lower. And I think that's attributable to a higher  
10 availability of residential and natural gas in MISO West.

11 And if you think about how that looks in the MAPP\_US  
12 Region, for the most part, those cooperatives and  
13 meetings -- there are some expectations, but for the most  
14 part they don't have the availability of residential and  
15 natural gas.

16 And, of course, NorthWestern is a pretty big  
17 exception of that being that they are also a natural gas  
18 utility throughout most of their electric service  
19 territory. And so because of that, I thought that the  
20 MISO West load shape was probably a better fit for  
21 NorthWestern.

22 Q. You had stated winter and shoulder years. Did mean  
23 winter and shoulder months?

24 A. Yeah. I should say winter and shoulder load blocks,  
25 which are blocks of hours.

1 Q. Doesn't the new load shape still overshoot  
2 NorthWestern's expected energy consumption by 7 percent?

3 A. It does. However, I think it's -- however, I think  
4 that that's still reasonable. As we heard from Mr. Green  
5 yesterday, NorthWestern is expecting their energy demand  
6 to grow at a faster rate than their peak demand. And if  
7 you look at my calculation, my load shape is dependent on  
8 their peak demand.

9 And I think if you compare my peak demand growth  
10 rate to what they're predicting, we're probably not very  
11 far off there.

12 The problem is in my calculation I don't -- I'm not  
13 forecasting an increase in -- I'm not forecasting the  
14 increase in energy demand that they are. So basically my  
15 load factor, which is energy demand under peak demand,  
16 stays constant throughout the 20 years. Whereas, their  
17 load factor is going to increase throughout the 20 years.

18 So what you're going to see as a result of that is  
19 as we move down these 20 years that 7 percent is going to  
20 drop and probably eventually become a negative number.  
21 And I'm -- I think that's probably going to account for  
22 that error.

23 Q. I would direct your attention to what has been  
24 marked for identification purposes as Staff Exhibit 6.  
25 Would you explain what Staff Exhibit 6 is?



1 A. Staff Exhibit 6 is the new calculation of my avoided  
2 cost using those changes in capacity and NorthWestern's  
3 load shape. Depending on which year you start, I have  
4 two different levelized avoided costs calculated.

5 Beginning in 2013 I come up with a number \$46.23.  
6 Beginning in 2014 I counted the number \$47.55.

7 Q. I would direct your attention to what has been  
8 marked as Staff Exhibit 7. Would you explain what Staff  
9 Exhibit 7 is, please.

10 A. Staff Exhibit 7 is basically the Excel spreadsheet  
11 version of the 14 attachments that are included in my  
12 Exhibit 2.

13 Q. And then I would direct your attention to what has  
14 been as Staff Exhibit 8. Is that the same testimony as  
15 Staff Exhibit 2 except it contains confidential  
16 information?

17 A. Yes.

18 Q. In earlier testimony there was some discussion  
19 about you coming up with an artificially low price. Do  
20 you have a reason to come up with an artificially low  
21 rate?

22 MR. UDA: I'm going to object to the question.  
23 I think, first of all, it mischaracterizes the testimony  
24 that we've heard. Second of all, I wasn't aware of the  
25 fact that Staff was getting to do rebuttal at the same

1 time that they were getting to do their direct case so  
2 I'm going to object to the question.

3 MS. CREMER: My response would be it was his  
4 question to his witness when he stated that Mr. Rounds  
5 had come up with an artificially low price. So we can  
6 clear it up now, or we can clear it up later, I guess.

7 And the reason Staff does its testimony the way  
8 it does is because this is the one time I have to do  
9 direct. I don't put mine on a second time.

10 MR. UDA: I appreciate that, Ms. Cremer. And  
11 let me just say I don't think that what I asked him was  
12 whether it was artificially low. I think what I asked  
13 him was why he got the numbers that he got and how he got  
14 there.

15 MR. SMITH: With that difference noted, I will  
16 overrule the objection. Because I think it goes to the  
17 same end result anyway.

18 Please proceed.

19 A. I don't have a reason to come up with an  
20 artificially low objection -- or avoided cost. You know,  
21 I think Staff's role -- we've thought Staff's role from  
22 the beginning of this case was to try and be as unbiased  
23 as possible and use the facts to come to the right  
24 answer.

25 Q. And referring to Oak Tree's scenarios that rely on

1 stated capital costs of new plants, do you agree with  
2 Mr. Lauckhart's conclusions?

3 A. I don't. The problem that I have with using those  
4 scenarios is that it appears to me that Mr. Lauckhart is  
5 using some levelized cost numbers for large plan projects  
6 as a substitute for a market price.

7 And I think we know that in the case of trying to  
8 determine what's going to replace Big Stone, should it be  
9 shut down, the market price will not be determined by  
10 whatever -- whatever project replaces Big Stone. And I  
11 don't think Otter Tail looked at a market solution in  
12 trying to replace 3 million megawatt hour production  
13 annually or something close to that and 456 megawatts of  
14 capacity.

15 You can't do that with the market. And so I don't  
16 think they even considered that.

17 You know, and, further, last night after some of the  
18 testimony I went and started down the rabbit hole of what  
19 was North Dakota's advanced determination of prudence or  
20 ADP for the Big Stone AQCS, which is what one of the  
21 exhibits given by Oak Tree yesterday came from.

22 And, you know, I just started coming up with a lot  
23 of questions. For instance, it looked like the avoided  
24 cost they were using was based on a 20-year projection  
25 beginning in 2016. However, I don't think anybody

1 believes that the useful life of that retrofit would be  
2 20 years. In fact, it appeared to me that Otter Tail had  
3 told South Dakota Department of Environment and Natural  
4 Resources that it was supposed to be 30 years.

5 I also -- another thing that worried me a little bit  
6 was that in Burns & McDonnell's report it looked like  
7 they had used what they termed inputs that Otter Tail had  
8 used in their Minnesota IRP and then listed the Docket  
9 No.

10 And I'm quite a bit more familiar with that docket,  
11 given that Otter Tail is still actually working on that  
12 IRP in Minnesota and, I think, filed a new base load  
13 diversification study just last month. Or it might have  
14 been October. And I am more familiar with that because I  
15 was asked to be part of a stakeholder committee in  
16 determining the inputs for their study, which was sort of  
17 a mini IRP.

18 And throughout that process what I learned was that  
19 the inputs that Minnesota had actually required of them  
20 included carbon costs, which we know is something that's  
21 not supposed to be included in the numbers that we're  
22 coming up with here. Not only carbon costs but carbon  
23 costs that I think are really unreasonable.

24 For instance, they filed this plan either in  
25 November or October of this year, and they were required

1 to include carbon costs beginning in 2012, and we already  
2 know that there are no carbon costs of 2012. So that was  
3 a little bit concerning to me.

4 It looked like the North Dakota Commission Staff  
5 ended up believing that also some of the capital cost  
6 numbers were inflated.

7 You know, and then sort of back to the point of  
8 using a -- whatever maybe utility has looked at as an  
9 avoided cost. And since we're talking about Otter Tail,  
10 I'd point to Otter Tail's energy efficiency programs.  
11 Because I think we all know that the cheapest incremental  
12 cost at this time is energy efficiency.

13 So if we're going to set a market price based on the  
14 utility's incremental costs, you know, we should look at  
15 Otter Tail's avoided cost of around 1 cent per kilowatt  
16 hour, which in this case translates to about \$10 per  
17 megawatt hour.

18 And I don't actually believe that should be the  
19 market price. Just using that for illustrative  
20 purposes.

21 Q. Based on your education and experience, do you have  
22 a recommendation for the Commission?

23 A. Yes.

24 Q. What is your recommendation as to the proper  
25 application of the hybrid method with no inclusion of

1 carbon costs?

2 A. I think the proper application of the hybrid method  
3 would be to look at each hour of the year and compare  
4 NorthWestern's load, their base load generation, and  
5 Oak Tree's output. And then depending on how the hours  
6 come out, if you look at hours in which base load  
7 generation exceeds its load, the avoided cost should be  
8 set by the cost of NorthWestern's most expensive base  
9 load generator during the hours which NorthWestern's load  
10 exceeds its base load generation by at least Oak Tree's  
11 output then the avoided cost should be set at the market  
12 price.

13 During the hours in which NorthWestern's load  
14 exceeds its base load but not by as much as Oak Tree's  
15 output level, the avoided cost should be split.

16 Q. What is your recommendation as to the proper natural  
17 gas inputs to use in the hybrid method based on market  
18 conditions and projections as of February 25, 2011, the  
19 date on which a legally enforceable obligation was  
20 created?

21 A. I think the best natural gas forecast we had at that  
22 time was the 2011 EIA's 2011 Annual Energy Outlook Early  
23 Release Reference Case released December 16, 2010. I  
24 much prefer that over.

25 (Mr. Makens joins the meeting telephonically)

1           THE WITNESS: That was maybe not a true  
2 sentence.

3 A. I much prefer that over the 2010 Annual Energy  
4 Outlook numbers, given what the EIA thought was a large  
5 jump in recoverable shale gas.

6 Q. What is your recommendation as to the proper  
7 electric market rates reflecting market conditions and  
8 projections as of February 25, 2011?

9 A. I believe the proper electric market rates are those  
10 that were included in that same AEO 2011 Early Release  
11 Reference Case as the generation price.

12 Q. What is your recommendation as to the proper  
13 capacity contribution and resulting capacity credits to  
14 be included in the avoided cost and added into the hybrid  
15 method under the Titan 1 method?

16 A. I think the best avoided cost -- the best capacity  
17 contribution to the avoided cost should be \$20 per  
18 kilowatt year with an accredited capacity of 12.9  
19 percent, as I calculated in my Exhibit 3.

20 Q. What is your recommendation as to NorthWestern  
21 Energy's avoided cost levelized over a 20-year period?

22 A. I'm sorry. Can you repeat that?

23 Q. Yes. What is your recommendation as to NorthWestern  
24 Energy's avoided cost levelized over a 20-year period?

25 A. I believe NorthWestern's avoided cost levelized

1 avoided cost over a 20-year period would be \$46.23 if the  
2 project went into service in 2013 or \$47.55 if the  
3 project went into service in 2014.

4       However, I would, again, prefer the Commission use  
5 the annual -- the annual numbers that I calculated that  
6 they could find highlighted on Staff Exhibit 6.

7 Q.    Thank you.

8               MS. CREMER:   I would offer Staff exhibits -- and  
9 I can do them as a group, or do you want me to do them  
10 one by one, Mr. Smith?

11              MR. SMITH:   You can do them either way, and if  
12 somebody wants to object to any of them --

13              MS. CREMER:   Okay.

14              MR. SMITH:   Can I ask one question because I'm  
15 trying to --

16              MS. CREMER:   Sure.

17              MR. SMITH:   Is one of them Staff 7?   I mean,  
18 isn't that in already, Staff 7?

19              MS. CREMER:   Yes.   Well, you know, we prefiled  
20 it with his testimony.

21              MR. SMITH:   I'm just thinking, I mean, so  
22 they've already been admitted; correct?

23              MS. CREMER:   2, 7, and 8 were, yes.

24              MR. SMITH:   Okay.

25              MS. CREMER:   So I'm just going to at this time



1 offer 3, 4, 5, and 6.

2 MR. SMITH: Okay. Well, why don't you offer  
3 them all, and if somebody has an objection, we'll single  
4 that out to any particular exhibit.

5 MS. CREMER: All right. Thank you. And so  
6 Staff would offer Staff Exhibits 3, 4, 5, and 6. And  
7 then Mr. Rounds is available for cross-examination.

8 Thank you.

9 MR. SMITH: Objections?

10 MR. UDA: I don't believe I'm going to have any  
11 objections, but as I noted yesterday at the outset, I  
12 kind of have to make sure I understand how these new  
13 exhibits fit into Mr. Rounds' preexisting testimony  
14 because he did not file any responsive testimony.

15 So with respect to the four new exhibits, I may  
16 not have any objections, but I think I need to ask him  
17 about those exhibits before I can make a determination.

18 MR. SMITH: Okay. Well, with that, I think what  
19 we'll do is treat those exhibits as offered, and we will  
20 withhold judgment on admission pending your examination.

21 With that, please proceed, Mr. Uda, with your  
22 cross-examination.

23 CROSS-EXAMINATION

24 BY MR. UDA:

25 Q. Thank you. The first question I want to ask you,

1 Mr. Rounds, is it your recollection that Mr. Lauckhart  
2 was critical of your energy price forecast?

3 A. Not specifically.

4 Q. Okay. In fact, he said that he thought it was  
5 generally reasonable, didn't he?

6 A. I believe so.

7 Q. Okay. So that wasn't a criticism that you were  
8 being biased in any way; correct?

9 A. Correct.

10 Q. And, in fact, didn't Mr. Lauckhart also testify that  
11 although he thought you made some errors, that in general  
12 the errors were kind of in both directions so he thought  
13 you were trying to be fair?

14 A. I don't remember if he said I made errors in both  
15 directions. If we're getting to the point of what could  
16 be considered maybe why Oak Tree might consider my  
17 numbers to be artificially low, I would say there's two  
18 interpretations; one, that they're biased to be  
19 artificially low and, one, that there are errors that  
20 caused them to be -- or disagreements in inputs that  
21 caused them to be artificially low.

22 Q. Right. But that wouldn't necessarily mean that we  
23 think you're biased; correct?

24 A. Correct.

25 Q. Okay. First of all, I want to talk to you a little

1 bit about how you prepared your electric price forecast.  
2 Can you explain to the Commission a little bit the  
3 source, where you went, how you derived the sources of  
4 information that you used to prepare that forecast?

5 A. Sure. The AEO includes a national -- a U.S. wide  
6 generation price that is an annual number. And at the  
7 same time the EIPC modeling results from the business as  
8 usual case, which is pretty similar to the earlier  
9 referenced case that we had done with the EISPC, or EISPC  
10 group, came out with some -- quite a bit more granularity  
11 in numbers.

12 We looked at load blocks, basically 20 different  
13 chunks of hours across the year. And we came up with,  
14 well, basically much more granular data. So what I did  
15 was basically mapped the generation price from the EIA on  
16 to those load blocks based on the variation that we had  
17 come up with in our results.

18 Then -- well, I'm skipping a step. Originally I had  
19 to make the generation price somewhat more regional,  
20 given that it was a U.S. price. So I took the  
21 relationship between I believe it was all in electricity  
22 costs between the U.S. and the West North Central Region.  
23 And I used that to factor the U.S. price before basically  
24 spreading across the load blocks using the EIPC data.

25 Q. Could you explain for the Commission what the EIPC

1 acronym stands for?

2 A. Yes. The EIPC is the Eastern Interconnection  
3 Planning Collaborative.

4 Q. Okay. And when the Eastern Interconnect Planning  
5 Collaborative prepared this particular study that they  
6 did, did they rely on the 2011 EIA Early Reference Case?

7 A. In some cases they did. Specifically for the  
8 natural gas price they did.

9 Q. Okay. And did they use any other information from  
10 the EIA Early Release?

11 A. There were a lot of inputs. I assume we did, but I  
12 can't recall what exactly it was.

13 Q. But when you prepared your forecast, did you rely on  
14 the EIA electric price forecast for your numbers?

15 A. Yes.

16 Q. Okay. And how did you use those?

17 A. I think I've told you that before. I scaled them  
18 from the U.S. price. Taking the generation price I  
19 scaled them regionally using a factor between the average  
20 U.S. price involving electricity and the West North  
21 Central price involving electricity.

22 Q. So you weren't just using the numbers from the EIA  
23 Early Release, you were using those to adjust what you  
24 had done previously when you used the EIPC analysis; is  
25 that correct?

1 A. I don't know if I'd characterize it that way.  
2 Because really the EIA numbers are the basis. The EIPC  
3 results add sort of some granularity.

4 Q. Okay. And so did you believe -- or do you believe  
5 now, given the criticism you've received specifically  
6 from NorthWestern Energy, that NorthWestern Energy's  
7 criticisms of what you did are valid?

8 A. Well, I mean, I think anybody's forecast is going to  
9 have error. And I think they found some points that  
10 introduced error, but I think it's probably just about as  
11 good of a forecast as you're going to come up with.

12 Q. Okay. Now let me ask you this: With respect to how  
13 you measure the load, I think you've testified here today  
14 that you think that the load numbers you came up with are  
15 reasonable, and you think they're actually within the  
16 range of reasonableness; is that correct?

17 A. Correct.

18 Q. Okay. Would it be appropriate -- would it be one  
19 way of looking at NorthWestern's load to also include in  
20 addition to the retail load also the wholesale load?

21 A. I don't think it would be. You know, when we look  
22 at what NorthWestern -- you know, kind of coming back to  
23 the discussion we had this spring with what is actually  
24 included in the -- in NorthWestern's avoided cost, their  
25 off system sales shouldn't really be included in that.

1 Because that's not really a cost that they can avoid.  
2 That's a revenue to them.

3 Q. Okay. But just talking about it from the standpoint  
4 of the availability of generation in any given hour,  
5 given day, given month, given year, to the extent that  
6 these sales are being made, there is generation being  
7 applied to those sales; is that correct?

8 A. Yeah. It's not their responsibility, though. It's  
9 not -- it's not the load that they serve.

10 Q. Okay.

11 A. They end up -- you know, obviously they end up  
12 serving it because they have excess power. But if they  
13 didn't have excess power, they wouldn't have to go find  
14 that power elsewhere.

15 You know, and I also looked at I think it was the  
16 FERC Form 1 that you guys handed out yesterday. And if  
17 you look at the actual value of the power that they sold  
18 on the market, I think it came out to like \$20 a megawatt  
19 hour.

20 So if you did include those off system sales, I  
21 don't think it would be at same market price. It would  
22 probably be at their base load generation cost and, well,  
23 probably below their base load generation cost because  
24 it's at times of very -- well, very off peak times.

25 Q. Right. Now and I think maybe we're talking past

1 each other. I wasn't suggesting that in any way those  
2 off system sales in that respect should be included as an  
3 adder in any way to avoided cost.

4 What I was asking is when you look at their -- the  
5 load generation numbers when you're making off system  
6 sales there are generators committed to making those  
7 sales.

8 So the question is would be one way to look at this  
9 be, okay, overall NorthWestern has this many hours of  
10 generation and has these obligations?

11 A. You know, again, I don't think that that would make  
12 any sense. Just because of the fact that it's not costs  
13 that they can avoid. You know, due to having a contract  
14 to sell capacity, if they're long on capacity, have you  
15 looked at that, because I don't think that matters  
16 either.

17 Q. Well, I mean, I guess the question is have you  
18 looked at what those obligations really are? Do you  
19 know?

20 A. Only from your witness's testimony.

21 Q. Okay. Let me ask you this: Did you use the same  
22 base load generation name plate in every hour?

23 A. I did.

24 Q. Given that, is there a risk that you're -- you're  
25 using an average number then; correct?

1 A. I'm actually using their maximum capacity, which,  
2 you know, they've said that their average is actually  
3 like around 191 megawatts, and I made the assumption that  
4 if they could serve it with their generation, their base  
5 load generation, that they would.

6 So that's the difference. I think I came up with  
7 like 204 point something and to their 191. So that's the  
8 difference in those two numbers.

9 Q. Okay. And but you didn't use the hourly generation  
10 and match it to the hourly load, did you?

11 A. How do you mean?

12 Q. Well, I mean, there's actual generation numbers that  
13 are available and actual load numbers that are available,  
14 and they vary over time in relation to one another.

15 Would you agree with me?

16 A. Correct. You're talking about the -- the data that  
17 NorthWestern included in their original testimony?

18 Q. Correct.

19 A. I did not use that.

20 Q. Okay. So the number that you're using is really --  
21 you're using 204, which is the max generation capability.  
22 But that's an average number over that time period; is  
23 that correct?

24 A. I'm -- you could consider it an average number. I'm  
25 not assuming the number goes any higher than that.



1 Q. Right.

2 A. Right.

3 Q. Okay. So when you use that number is there a risk  
4 that you're overrepresenting the number of hours that  
5 NorthWestern is actually using coal to serve its load?

6 A. There is definitely a risk that's happening. The  
7 reason I did it the way I did was because in those cases  
8 where they would do that, the market price should  
9 probably be lower than the price of their base load  
10 generation. So I didn't think that probably helped out  
11 Oak Tree's case any.

12 Q. Okay. But if you were in a situation where you're  
13 using an average number, aren't you actually pushing more  
14 hours into the low load hours -- or more generation into  
15 the low load hours and reducing the average -- I mean,  
16 reducing the amount that you would be putting into the  
17 high load hours in order to achieve this average?

18 A. I'm not following. You know, I use this  
19 204 megawatts for every -- you know, technically in my  
20 analysis I used it for every load block. So you could  
21 consider that to be the average across those load blocks.  
22 But the average of 204 and 204 and 204 and 204 and 204 is  
23 204. But I didn't stray from 204.

24 Q. So when you used the 204 number was the assumption  
25 then that those plants were available 100 percent of the

1 time?

2 A. Yes.

3 Q. Okay. And is that a real world assumption that  
4 those plants would be available 100 percent of the time?

5 A. No.

6 Q. Okay. Do you know what NorthWestern's coal plants  
7 typically operate at in terms of availability?

8 A. Not specifically NorthWestern's. I know typically  
9 a coal plant usually runs around a capacity factor of  
10 80 percent.

11 Q. Okay. I want to ask you about -- you've done a lot  
12 of work on this whole issue of considering the  
13 alternatives to Big Stone and Neal to this point; is that  
14 correct?

15 A. I haven't. I listened to the testimony yesterday,  
16 and last night I spent about a half-hour, 45 minutes  
17 looking through some documents online.

18 Q. Okay. Have you looked at any other utilities that  
19 are in similar situation to the co-owners of the Big  
20 Stone plant with respect to what market alternatives they  
21 might be considering?

22 A. I don't -- I haven't seen -- I don't believe any of  
23 our regulated utilities are looking at possibly retiring  
24 or retrofitting, you know, such a huge portion of their  
25 load. So I'd say no.

1 Q. Okay. For example, have you looked at anywhere  
2 outside of your jurisdiction to look at other utilities  
3 publicly owned or otherwise that are heavily dependent  
4 upon coal generation and are considering alternatives to  
5 retrofitting those facilities?

6 A. Not in depth.

7 Q. Okay. And would you agree with me that there are  
8 a -- in the Midwest, for example, there are a number of  
9 utilities that are heavily dependent upon coal as their  
10 primary generating resource?

11 A. Yes.

12 Q. Okay. And are you aware of any situations in the  
13 Midwest where these heavily dependent on coal generation  
14 utilities have a substantial amount of load that they  
15 would have to serve in the event those plants have to be  
16 in some way or another either retrofitted or replaced?

17 A. Would you repeat the question?

18 Q. Well, that's a bad question, and I apologize. I'm  
19 actually tired, and so I'm struggling. But the general  
20 point here is, I mean, I believe I heard you say in  
21 response to a question from your counsel that you don't  
22 think that it's a feasible alternative to go to market to  
23 replace 3,000 megawatts. Is that right?

24 A. I think -- I might have misspoke, but it's 3 million  
25 megawatt hours.

1 Q. I'm sorry. 3 million megawatt hours. It's my  
2 fault. Do you know whether that's true?

3 A. I would have a hard time as Staff going along with a  
4 plan, a utility's plan, to depend on the market for that  
5 amount of energy in this region. Big Stone is the only  
6 large coal plant in South Dakota. And at around  
7 3 million megawatt hours a year you're looking at  
8 10 percent -- or 30 percent of South Dakota's in-state  
9 generation.

10 It's also about 30 percent of the demand, of the  
11 energy demand used across the entire state in a year.  
12 It's a huge plant.

13 Q. Well, no. And I understand that it's large. But  
14 this was what prompted my question. Do you know whether  
15 any of the other utilities in the Midwest who are facing  
16 this same kind of situation have similar decisions to  
17 make with respect to very large service obligations  
18 similar to those faced by the co-owners of the Big Stone  
19 plant?

20 A. I'm sure there's a lot of utilities in the Midwest  
21 right now that are having to make similar decisions.

22 Q. Okay. And some of them may have actually  
23 obligations that they have to meet that actually might be  
24 larger than those that are faced by the Big Stone  
25 co-owners; is that correct?

1 A. I'm not sure. Could you be more specific?

2 Q. Well, I'm just asking you if you know. I mean, if  
3 you don't know, that's fine.

4 A. I just don't understand the question. You said  
5 obligations. What type of larger obligations.

6 Q. I mean, I'm gathering from what you're saying is  
7 you're saying, well, this is a really large plant and  
8 there's a lot of load that has to be served with  
9 something. And so we're talking about replacing this  
10 very large coal plant with a market resource.

11 And I'm asking you, you know, relatively speaking,  
12 are there other facilities -- or utilities in the Midwest  
13 that are facing the same situation that might even have  
14 to displace more coal generation?

15 MS. CREMER: And I'm going to object on a couple  
16 of grounds. One, he's asked and answered and he's asking  
17 speculation and he just keeps adding one more little  
18 nugget, one more little nugget, in more of a testifying  
19 manner than a question.

20 And to me he either needs to break it down into  
21 a simple question rather than all of these compound,  
22 little facts he keeps adding.

23 MR. UDA: Can I respond?

24 MR. SMITH: I'm going to overrule and let him  
25 try to answer it.

1 MR. UDA: Okay.

2 Q. Did you understand the question?

3 A. So if I understand right, you're asking if there are  
4 other utilities who maybe if had to retire a coal plant,  
5 would be looking at market purchases of larger than  
6 3 million megawatt hours a year?

7 Q. Right.

8 A. So that would mean other utilities are potentially  
9 looking at closing down coal plants larger than Big  
10 Stone?

11 Q. That's correct.

12 A. Yes.

13 Q. Okay. Do you know whether those utilities are  
14 considering using market purchases to replace their coal  
15 generation facilities?

16 A. I don't know specifically, but I'd be surprised if  
17 they were.

18 Q. Is your concern about relying on the market based on  
19 a concern about the availability of the market to serve  
20 as a surrogate or substitute for coal generation over the  
21 long-term?

22 A. To clarify, you're saying, excuse me -- are you  
23 saying that -- well, how about you just repeat the  
24 question.

25 Q. Well, let me ask it this way: I'm trying to get to

1 the -- I'm trying to get to the nature of what your  
2 concern is. Because you're saying, okay, this is a lot  
3 of generation to replace. And I'm trying to understand  
4 why -- and I don't know. Maybe I should just ask this:

5 Have you done any analysis of the availability of  
6 energy capacity in this region to replace the Big Stone  
7 unit?

8 A. No. But I would have a hard time believing there is  
9 an extra 3 million megawatt hours of energy out there at  
10 this time.

11 Q. Okay. And that's based on what?

12 A. There's nothing in the region that could provide  
13 that type of generation. I guess I'm just familiar with  
14 generation in the region.

15 Q. So when you talk about the region, are you referring  
16 specifically to South Dakota, or are you referring to the  
17 entire MISO region?

18 A. Big Stone lies in the western edge of MISO. So I'm  
19 talking about really sort of an -- in my map I'd be  
20 talking about the MISO West and the MAPP\_US regions.

21 Q. Let me ask you this, Mr. Rounds: Okay. Assuming  
22 that the market is not an alternative to the retrofit of  
23 Big Stone, is it appropriate to use the numbers that have  
24 been provided by the Big Stone co-owners in 2016 dollars  
25 instead of \$18.35 per megawatt hour as the variable cost

1 of the coal units?

2 MR. BROGAN: Mr. Smith, I'm going to object to  
3 that question. It mischaracterizes the numbers that have  
4 been provided. There's been ample testimony in this  
5 docket that the numbers to which Mr. Uda is referring  
6 have been provided by Otter Tail, not by the co-owners.

7 And the only representation that they were  
8 provided by co-owners is from Otter Tail, and that's  
9 been specifically contradicted by the testimony of  
10 Bleau LaFave.

11 MR. UDA: Let me just respond to that. I know  
12 what Mr. LaFave said. I also know that they're one of  
13 the co-owners of the Big Stone plant, and the  
14 representation that was made by Otter Tail is that this  
15 Burns & McDonnell report, which includes the very options  
16 that are in the Petition, that that was a representation  
17 made by the co-owners.

18 That includes NorthWestern. And so I'm just  
19 asking about the numbers and which numbers are  
20 appropriate to use.

21 MR. BROGAN: Mr. Smith, the Otter Tail -- excuse  
22 me. The Oak Tree exhibit that Mr. Uda is referring to,  
23 which was Otter Tail's Petition, does not specifically  
24 reference the Burns & McDonnell report and does not say  
25 that the co-owners adopted those numbers.



1           MR. UDA: Well, I think we can agree to disagree  
2 about what it says, but the options that are listed in  
3 the Otter Tail Petition are exactly those that are in the  
4 Burns & McDonnell report, and there's a representation  
5 that this is the presentation of the co-owners of the  
6 facility.

7           MR. SMITH: Ms. Cremer, do you have a --

8           MS. CREMER: Well, I would just go back to I  
9 think what was NorthWestern's original objection to this  
10 is maybe we ought to have a witness that you can actually  
11 cross-examine on that document.

12           Herein lies the problem. You know, we need --  
13 somebody needs to ask these questions about what was  
14 meant. And so I agree with NorthWestern here that we  
15 don't know the answer, and we shouldn't be assuming.

16           MR. SMITH: Well, if I'm understanding Mr. Uda's  
17 question, he's not asking Brian to delve into the  
18 accuracy of the Burns & McDonnell report. He's just  
19 asking him that here's a number that's out there as a  
20 number that -- a set of numbers that at least Otter Tail  
21 as the manager of Big Stone is asking for rate relief  
22 from the Commission for.

23           MS. CREMER: And I would just have to state  
24 that, you know, again, Mr. Rounds, if he knows the  
25 answer -- I don't know. It's not my --

1 MR. SMITH: Exactly. That's my point. My point  
2 is he's not saying, Brian, I want to know if that number  
3 is exactly correct. He's saying assuming it is, what  
4 does that mean, if I'm understanding the question.

5 MR. UDA: Well, the question was really just,  
6 okay, we have two numbers in this proceeding. One is  
7 assuming a variable cost of \$18 and change per megawatt  
8 hour. And then another number here, which is \$40.68.

9 And I just wanted to -- and that's in 2016  
10 dollars. And I just wanted to ask Mr. Rounds if he  
11 understood what the difference was and whether one was a  
12 more appropriate number to use than the other one.

13 MR. SMITH: And, I mean, based on that, I mean,  
14 I'm going to overrule. Just because let's assume the  
15 number ends up being \$50 million less. I don't think it  
16 changes the nature of the question you're asking. Okay.

17 Q. Did you understand the question, Brian?

18 A. No.

19 Q. Okay. Let's take another run at this. Okay. In  
20 your calculation that you did of the variable costs of  
21 operating the coal generation that NorthWestern has  
22 presently in its portfolio, they used a figure I think  
23 around \$18 a megawatt hour for variable cost.

24 Did you use that in your calculation?

25 A. I don't believe I used an \$18 value. I used the

1 run-up price that they had listed in I think it was  
2 Mr. LaFave's original Exhibit 3.

3 Q. Was that 22, I think?

4 A. I could find it here.

5 Yes. It's on Attachment 9 to Staff Exhibit 2. And  
6 if you look on the first page, it's on the bottom  
7 right-hand corner. I believe they provided numbers  
8 beginning in 2013 out to 2032. And I extrapolated the  
9 2033, '34, and '35 numbers as well as the 2012 even  
10 though I didn't end up using it.

11 Q. Okay.

12 A. But it starts at \$23, and their number ended at 38.  
13 And then I extrapolated that out to 41.90 in 2035.

14 Q. Okay. In your opinion, is there any reason to  
15 suspect that the Big Stone plant plus the new air quality  
16 control system will substantially affect the variable  
17 operating costs of the Big Stone plant?

18 A. Yeah. I think it probably will.

19 Q. Okay. So if that plant in 2016 is retrofitted and  
20 approved as proposed by Otter Tail, is there a reason to  
21 adjust those numbers from 2016 on?

22 A. I think there probably is. I don't know to what  
23 extent.

24 Q. Okay. I wanted to ask you a general question about  
25 the Big Stone proceeding. Is Big Stone at this point in

1 your opinion still an avoidable cost? The retrofit  
2 portion of it at least?

3 MS. CREMER: Are you referring to a docket in  
4 front of us?

5 MR. UDA: I'm just asking him his opinion. We  
6 had some discussion here yesterday about whether or  
7 not -- from Mr. LaFave about whether he perceived  
8 Big Stone at this point, at least the retrofit portion of  
9 it, to be an avoidable cost. And I just wanted to ask  
10 Mr. Rounds if that was his opinion as well.

11 A. I agree. I think with it was Mr. LaFave who said  
12 that regardless of whether or not they take power from  
13 Oak Tree, they're still going to have to retrofit Big  
14 Stone.

15 Q. Right.

16 A. So in that sense, for the purpose of determining an  
17 avoided cost for Oak Tree, it's not avoidable.

18 Q. But what about -- again, getting back to this --  
19 well, what about some combination of Oak Tree and the  
20 market?

21 A. You know, again, I already said I don't think  
22 there's a market option here.

23 Q. Okay. But I guess what I'm getting to is regardless  
24 of what the alternatives that are available, the costs  
25 that are associated with the Big Stone retrofit have yet

1 to be approved by the Commission. So technically  
2 speaking, at this point that cost is still avoidable at  
3 this point. Is that not right?

4 A. Yeah. I can't say -- you know, technically  
5 speaking, that might make sense, but it has no bearing  
6 with what Oak Tree's avoided costs would be.

7 Q. Okay. I wasn't really asking about what Oak Tree's  
8 avoided cost would be. I was just asking at this point  
9 is Oak Tree -- I mean, excuse me. Is Big Stone retrofit  
10 portion of their costs that would be required to do the  
11 ACQS, is that still technically at this point an  
12 avoidable cost?

13 A. You know, depending how we define avoidable cost,  
14 it's a cost they could avoid if they could find a cheaper  
15 way to replace Big Stone, yes.

16 Q. I want to talk to you about your capacity  
17 calculation. I'm puzzled. I have to be honest with you.  
18 I had thought in your original testimony on November 21  
19 you had said -- I think what Mr. Lauckhart testified to  
20 at the original proceeding was reasonable. It was in the  
21 \$17 a kilowatt year range. And you adjusted that number  
22 to 20.

23 First of all, why did you adjust it to 20 for the  
24 first year? Is that just because it would be a year  
25 later, or what was that based upon?

1 A. My answer to that question would delve into  
2 confidential information so if --

3 Q. Can you answer it in some way that it doesn't make  
4 it confidential?

5 A. I can't because the \$20 is pretty specific.

6 Q. Well, was that information that came from  
7 Mr. Lauckhart or Black & Veatch, or can you tell us the  
8 source of that number?

9 A. I thought it came out during the hearing back in  
10 March.

11 Q. Okay.

12 A. It's a number that we settled on in our posthearing  
13 brief.

14 Q. Okay.

15 A. Would be the first time you'd see it from us.

16 Q. Okay. Would you agree with me that Black & Veatch  
17 didn't stop at \$17 a kilowatt year over the length of  
18 their analysis?

19 A. I would agree that Mr. Lauckhart's analysis didn't  
20 stop at \$17. And I can tell you now since we've had our  
21 conference call during the week before Thanksgiving and  
22 since the testimony yesterday I had gone back and looked  
23 at his original testimony a couple of times.

24 And I'm not sure what exactly Mr. Lauckhart used for  
25 his capacity value, but my intent was to use -- was to

1 base the inflationary factor off of Mr. Lauckhart's.

2 Q. Okay. But you said capacity value? I was talking  
3 about just the capacity cost portion of this calculation  
4 at this point. So did you just misspeak, or am I just  
5 not understanding you?

6 A. I was speaking of value in terms of dollars.

7 Q. Okay. All right. So and you were aware -- at  
8 least -- maybe you weren't aware. Were you aware of the  
9 fact that the reason the number for the first year was  
10 \$17 a kilowatt year was because Black & Veatch assumed  
11 that there was a surplus of capacity in this region in  
12 the time frame of the original years of that study?

13 A. Yes.

14 Q. And were you aware that by 2020 Black & Veatch  
15 escalated that number to over \$100 a kilowatt year?

16 A. I am -- I am, based on yesterday's testimony. I'd  
17 say I wasn't at the time I prepared any of this.

18 Q. Okay. The reason I was asking you that, about that,  
19 is because we had that little discovery call. And I  
20 think I asked you that same question, and I think you  
21 said your answer was no, you weren't aware of that.

22 Did you have a chance to go back and look at that  
23 after the discovery conference?

24 A. Correct. You know, as I -- I don't remember you  
25 saying that it increased to \$100. I think you told me

1 that it did include an inflationary factor. That's how I  
2 recall the conversation.

3 So I went back and I found what I thought the  
4 inflationary factor was, 2 and a half percent.

5 Q. So I guess my general question is were you trying to  
6 base your capacity value calculation on what Black &  
7 Veatch had come up with for a capacity value in their  
8 2010 Energy Market Perspective?

9 A. I was trying to base the inflationary factor off  
10 what Oak Tree had used.

11 Q. Okay. And you've heard testimony from -- seen  
12 testimony from Mr. Lauckhart with respect to the cost of  
13 the Aberdeen capacity that was acquired by NorthWestern.

14 Why isn't it appropriate to use Aberdeen as the  
15 appropriate capacity value for doing the calculation for  
16 Oak Tree?

17 A. I don't think it's appropriate because we know that  
18 there's a market for capacity that is less than the cost  
19 of building your own plant. And it seems like that  
20 market's always available. Nobody wants to rely on it.

21 But I think if you look at -- look over the past,  
22 you know, 10 years or so and look at what utilities have  
23 been paying for market purchase of capacity, I don't  
24 think you'll ever find that it was anywhere near the cost  
25 of building a CT.



1 Q. Okay. But since the Oak Tree contract is over a  
2 20-year period, you would have to acquire that capacity  
3 over a longer period than a lot of the transactions  
4 you're referring to; correct?

5 A. Yeah. I suppose. But you have to remember that  
6 this is a wind turbine, and we don't know exactly what  
7 sort of capacity we're going to get on a year-to-year  
8 basis.

9 And I think it's right that we try to come to an  
10 agreement on an accreditation factor, but it's pretty  
11 difficult to rely on for reliability purposes for the  
12 actual market cost as far as a year-to-year reserve  
13 requirement. You know, usually you'll see if a utility's  
14 a little bit short, then they'll go out and find that on  
15 the market. And I think this is more of that type of  
16 capacity.

17 Q. Okay. But you would agree with me that the  
18 accreditation factor is different -- a different portion  
19 of the calculation than the value itself; correct?

20 A. Yes. That's correct. You know, if -- I mean, I  
21 would prefer to use real numbers for everything. I would  
22 prefer to say, you know, let's wait until -- let's build  
23 it and then wait until 2014's over and then look back and  
24 see if you were avoiding market costs or if you were  
25 avoiding base load costs, let's look at what the actual

1 costs, were let's look at what the market price for  
2 capacity was, use the accreditation factor that was  
3 derived by MISO for that year, and do it that way.

4 But I don't think -- at least originally our legal  
5 counsel did not believe that was proper application of  
6 PURPA. So that is the -- that's the tact that we've  
7 taken in our analysis.

8 Q. Well, I have to say I agree with your legal counsel  
9 on that point.

10 But getting back to it, I mean, wasn't the  
11 justification for building the Aberdeen facility in the  
12 first place that capacity was going to become an  
13 increasingly scarce resource over the long-term?

14 A. To tell you the truth, I can't tell you what the  
15 reason for building the Aberdeen gas plant is.

16 Q. And are you involved in the -- I mean, I don't even  
17 know if NorthWestern has filed a case for recovery or --  
18 in rate base of the Aberdeen facility.

19 Have they done that yet?

20 A. Not that I'm aware. My understanding is it will go  
21 into service in 2013, and immediately after it goes into  
22 service it will be considered used and useful, and so  
23 then they will file for a rate increase. And at that  
24 point we will -- the Commission will determine whether or  
25 not that was a prudent use of rate payer funds.

1 Q. Okay. And please correct me if I'm wrong, but I'm  
2 gathering from your testimony that you wouldn't similarly  
3 treat the Aberdeen facility the same way that you've  
4 treated the Oak Tree facility because you believe that  
5 the Oak Tree doesn't really provide the same sort of  
6 capacity that the Aberdeen facility would provide?

7 A. I would say that I think the market price of  
8 capacity in small increments will be less than the fixed  
9 costs of the natural gas turbine.

10 Q. Okay. Did you look at the page of the MISO document  
11 that you linked on page 2 of your November 21 testimony?  
12 I think we talked about that briefly during the discovery  
13 conference?

14 A. Yeah. I hope I looked at it. Yeah. I looked at  
15 it. Yes.

16 Q. Okay. I won't ask you what that means.

17 A. Little sarcasm. Sorry.

18 Q. That's okay. That's okay. I always appreciate a  
19 good sarcastic rumor. But remember we talked about I  
20 think you said there were -- we said 129, you said 126  
21 because you thought some of the nodes in there had  
22 negative values. And those -- those three -- I think  
23 three cases where they had negative values, those weren't  
24 used in the average to prepare that particular average  
25 for MISO; correct?

1 A. That's my understanding is there were three that  
2 came in below zero, as in they were actually using energy  
3 rather than producing energy and so they weren't included  
4 in the calculation.

5 Q. And MISO doesn't disclose what each of those nodes  
6 represents in terms of a particular facility; is that  
7 correct?

8 A. I don't know for sure. I didn't research that.

9 Q. Okay. So you don't know if any of these 129 nodes  
10 represent the Titan Wind Farm; right?

11 A. I don't know, but I thought they -- I thought Titan  
12 would have been included because MISO actually looks at  
13 capacity as part of the regional entity for the  
14 integrated system. So they actually do some capacity  
15 evaluation in the -- in the integrated system. So I  
16 thought Titan was probably one of those 129 nodes.

17 Q. But we can't determine from that which one it is; is  
18 that correct?

19 A. Not -- nobody has. I don't know if we could or not.  
20 You know, I think we have the capacity factor numbers  
21 from NorthWestern over those -- over the last two years  
22 so perhaps it's -- perhaps it's in there. Perhaps it  
23 matches up.

24 Q. And you were here for testimony yesterday where  
25 there was discussion about the fact that the actual

1 portion -- the region of the MISO study that includes  
2 where Oak Tree would be located had an average of about  
3 15 percent average capacity contribution; is that  
4 correct?

5 A. Yes.

6 Q. Okay. So why isn't it appropriate to adjust that  
7 particular capacity contribution from 12.9 percent to  
8 15 percent, whatever that number is?

9 A. You know, after that conference call when I made the  
10 adjustments to my capacity, I considered doing that. And  
11 there's two reasons that I decided not to. The first  
12 reason was that that data is -- was not available as of  
13 February 25, 2011.

14 If we were going to use data that was available now,  
15 we know that the market price would be a lot lower than  
16 it was then.

17 The other thing is, you know, as I've seen wind  
18 farms come up and come online, at least in South Dakota,  
19 as I've -- I guess I've been following the wind projects  
20 quite a bit over the last six years. What I've noticed  
21 is there's typically for the first one or two years there  
22 is a pretty low -- typically the wind farm doesn't meet  
23 its expected capacity factor.

24 And that's usually a result of sort of getting  
25 things up and running, getting things tuned up. You

1 know, the projects over on Buffalo Ridge still aren't  
2 hitting -- projects that went up in 2009, 2010 still  
3 aren't hitting and they're I would say 5 to 10 percent  
4 lower than we thought their capacity factor was going to  
5 be.

6 And in talking to developers they're saying that  
7 it's because they're just not quite tuned up yet, and  
8 they're having maintenance issues. And that seems to be  
9 the norm with the startup on wind projects.

10 Q. Okay. Let me ask you this: Is this, the manner in  
11 which the Titan capacity contribution is being  
12 calculated, now based on the average of the MISO region?

13 A. My understanding is the first year they used the  
14 MISO LOLE planning figure, which is this 12.9 percent.  
15 And then once they have historical data they average that  
16 into previous MISO data and until they get so many years  
17 of historical data, at which point it just becomes  
18 dependent on what -- what the historical data is.

19 I thought the testimony yesterday -- I guess I would  
20 agree with the testimony yesterday here on that I think  
21 from Mr. Green maybe.

22 Q. Given that NorthWestern's proposal is to calculate a  
23 separate capacity payment every year, why isn't a  
24 starting point now, not back then, relevant to a  
25 determination of the capacity contribution?

1 A. Could you repeat that? Sorry.

2 Q. Yeah. Well, I mean, you talked about, well, if we  
3 looked at energy prices today, they would be lower than  
4 they were in February 2011. But there's a separate  
5 capacity payment at least as proposed by NorthWestern,  
6 and my understanding is their proposal is this number  
7 would change every year.

8 So given that, isn't it appropriate to take into  
9 account what that number is now as opposed to what that  
10 number was in February of 2011, given they're basing this  
11 on, in part, the actual performance of the plant over  
12 time?

13 A. I would agree with you, if I agreed with  
14 NorthWestern's proposal, but I don't.

15 Q. Fair enough. But ultimately your capacity payment  
16 starts at \$20 a kilowatt year and escalates to 2032 at  
17 \$36 a kilowatt year; is that correct?

18 A. Looking at my Staff Exhibit 3, 2032 is showing 32.77  
19 per kilowatt year.

20 Q. 32.77. For some reason I had 36 in my notes. I  
21 apologize.

22 A. That might have been the 2035 number.

23 Q. Okay. So this is substantially lower -- I know we  
24 could argue about substantially, but it's lower than  
25 Mr. LaFave's numbers for capacity; correct?

1 A. Correct.

2 Q. Okay. And so why do you think that Mr. LaFave is  
3 wrong?

4 A. You know, it kind of comes back to what the actual  
5 market price of capacity is. And I have a hard time  
6 believing that the actual prices they've been paying for  
7 capacity over the last 10 years, let's say, have been  
8 increasing by I think he used like 4.74 percent  
9 inflation. It just did not seem reasonable to me.

10 Q. Okay. Now I want to make sure I understand. This  
11 goes back to the exhibits that you filed late. And I  
12 understand that there was a compressed time frame for  
13 this. And you obviously have put a substantial amount of  
14 work into those exhibits, and I appreciate that. But I  
15 need to understand exactly in detail how these revised  
16 exhibits changed your November 21 testimony. Because we  
17 don't have responsive testimony from you in this case.

18 So could you please explain in detail what changes  
19 these new exhibits make to your November 21 testimony?

20 A. I'll attempt to. And first let me say that the  
21 reason that this wasn't filed as responsive testimony is  
22 because this is not in response to the testimony that the  
23 other two parties filed. This is in response to the  
24 responsive testimony that the other two parties filed.

25 Q. Okay.



1 A. So if you want me to walk through my Exhibit 2, I  
2 can do that.

3 Q. Can you just summarize just the changes that you  
4 made?

5 A. Sure. I basically changed the -- what I thought the  
6 capacity value of Oak Tree was. And I changed the load  
7 shape of NorthWestern and just basically ran those back  
8 through the model. And I provided the spreadsheet to  
9 both parties earlier this week.

10 Q. And did Mr. Lauckhart comment on the spreadsheet you  
11 provided to the parties?

12 A. Yeah. Mr. Lauckhart sent me an even more revised  
13 spreadsheet early yesterday morning with some edits that  
14 he had made.

15 Q. Okay. And without saying that you agreed with the  
16 particular changes he made to your spreadsheet, are his  
17 numbers correct, given the changes that -- the  
18 assumptions that he made, presuming those assumptions  
19 were correct?

20 A. I thought he correctly used my model, given the  
21 assumptions that he used.

22 Q. Okay. Now Mr. Lauckhart in his November 21  
23 additional testimony based his calculation of the  
24 capacity payment on the cost of Aberdeen; is that  
25 correct?

1 A. I believe so.

2 Q. Okay. And you didn't file any responsive testimony  
3 to explain why reliance on that particular number was  
4 inaccurate or improper; is that right?

5 A. No. I didn't file any testimony rebutting either of  
6 the parties' original testimony.

7 Q. And so when you used the \$20 per kilowatt year  
8 figure, I think you've testified here today that this was  
9 based on your, I guess, review or analysis of actual  
10 capacity contracts that NorthWestern had entered into.  
11 Recently, I suppose?

12 A. Correct.

13 Q. Okay. And is this \$20 a kilowatt year figure based  
14 on any particular transaction or just your general  
15 assessment of what NorthWestern is paying presently for  
16 capacity?

17 A. It's based on a particular transaction.

18 Q. Okay. And which transaction was that?

19 A. The transaction with Basin.

20 Q. And when was this transaction with Basin --

21 MR. BROGAN: Excuse me. Mr. Smith, it seems to  
22 me that we're getting very close to confidential  
23 material.

24 MR. SMITH: I think we are. Yeah.

25 MR. UDA: Yeah. I think maybe we are. I wasn't

1 necessarily going to ask him about the cost of the  
2 contract, but I don't know if anything else about it is  
3 confidential.

4 MR. SMITH: Yeah. I guess I don't know this,  
5 Brian. But is your number -- maybe I shouldn't even ask  
6 the question --

7 THE WITNESS: Well, maybe I can -- maybe if  
8 you're looking for certain information here, I can point  
9 you to our posthearing brief after the March hearing in  
10 which there's a redacted version that points to how I  
11 came to that number.

12 Q. Was it in the testimony itself, or was it an  
13 exhibit?

14 A. No. It was in a brief of --

15 Q. Oh, in the brief. But was it an exhibit to the  
16 brief or just --

17 A. It was in the narrative.

18 Q. Okay. So without asking you anything confidential,  
19 can you -- do you know what the date of the transaction  
20 was?

21 A. I do not.

22 Q. Okay. So you don't know whether it was before or  
23 after February 25, 2011?

24 A. I don't recall.

25 Q. Okay.

1 MR. UDA: No further questions.

2 MR. SMITH: Thank you. Mr. Brogan, are you  
3 ready to go?

4 CROSS-EXAMINATION

5 BY MR. BROGAN:

6 Q. Good morning, Brian.

7 A. Morning.

8 Q. I have a few questions, but I'm afraid some of them  
9 may take some long answers.

10 A. We'll see.

11 Q. When you started out in your summary of your  
12 testimony today, you said that you determined  
13 NorthWestern Energy's hourly load. How did you do that?

14 A. I took a -- originally I took a load shape from the  
15 EIPC inputs that was an average of the load shape of the  
16 regions, I believe, as of -- the load shape of the  
17 utilities within the MAPP\_US Region, as I believe that  
18 study was done in 2006.

19 And then as I said in my additional exhibit, I then  
20 changed from the MAPP\_US Region to the MISO West Region.  
21 And I should probably add additional information that I  
22 first had to create a 20-year forecast of MISO's -- or of  
23 NorthWestern's peak demand, which I did using -- I  
24 started out using the biennial plan NorthWestern had  
25 filed in 2010. However, I was not able to pull a lot of

1 useful information from that and ended up using the  
2 EIPC's expected demand growth for the MAPP\_US Region.  
3 Which I think fit between the conflicting figures that  
4 were included in NorthWestern's plan.

5 Q. To clear up something that came up in one of  
6 Mr. Uda's questions I think about an hour ago, Mr. Uda  
7 asked you if -- if I don't mischaracterize it, if you  
8 thought that your load numbers reasonably estimated  
9 NorthWestern's load.

10 Is that your understanding of one of his questions?

11 A. I think he asked me that.

12 Q. Okay. And, as I recall, you said yes. My question  
13 is just for clarification. Did you mean your load  
14 numbers as originally shown in attachment BPR 6 or the  
15 load numbers that are now shown in Staff 5?

16 A. The load numbers shown in Staff 5.

17 Q. Did you compare your estimated load numbers to any  
18 of NorthWestern's actual load numbers?

19 A. I did not.

20 Q. If I look at Staff 5, it appears to me that you're  
21 estimating that in 2012 NorthWestern will have load in  
22 excess of 300 megawatts for about 110 hours, and that  
23 will be block 1, 2, and 3; is that correct?

24 A. Yes.

25 Q. Did you compare -- by any chance, compare that to

1 the actual number of hours that NorthWestern has shown  
2 its load to be over 300 hours?

3 A. No.

4 Q. You also indicated that you calculated Oak Tree's  
5 output. Could you explain how you did that, without  
6 going into any confidential information?

7 A. Yes. I -- within the EIPC inputs we had load shapes  
8 for wind generation using the same block format, which  
9 fit pretty perfectly with what I was doing. So the load  
10 shape -- the average to load shape for the MAPP\_US Region  
11 I think came out to a capacity factor that was less than  
12 the capacity factor that Oak Tree thought they were going  
13 to get.

14 So I took that load shape and scaled it up to  
15 achieve the capacity factor that Oak Tree was expecting  
16 to get.

17 Q. Just to make sure I understand then what you did is  
18 you took Oak Tree's annual estimated capacity factor and  
19 scaled up the EIPC MAPP\_USA wind capacity factors by  
20 blocking the Eastern Interconnection?

21 A. Correct.

22 Q. Did you compare those numbers at all to Oak Tree's  
23 expected output in their confidential exhibit?

24 A. I did not. I didn't think it would make a lot of  
25 sense to. Where Oak Tree provided one year of met tower

1 data, and in this case EIPC -- I believe EIPC's load  
2 shapes were based on an average of a number of years.

3 Q. You also indicated that with respect to Staff 3, if  
4 I'm not mischaracterizing your summary, you converted the  
5 capacity value, for instance, 2012, \$48,800, to dollars  
6 per megawatt hour; is that correct?

7 A. Correct.

8 Q. And how did you do that?

9 A. I took the capacity value that I thought they would  
10 get and divided it by the number of megawatt hours that  
11 Oak Tree expects to produce annually.

12 Q. If it capacity payment is based on that, if Oak Tree  
13 doesn't achieve its -- excuse me. Strike that. I'll  
14 come back to that one in just a minute.

15 When you said that you use the capacity factor that  
16 you thought Oak Tree would get, is that the same capacity  
17 factor that Oak Tree estimated it was going to get?

18 A. Yes.

19 Q. Okay. When you -- if Oak Tree doesn't produce in a  
20 given year up to that capacity factor, would including  
21 the capacity value in the per megawatt hour price result  
22 in Oak Tree being paid less than they should for  
23 capacity?

24 A. Sorry. Repeat that again.

25 Q. Well, hypothetically -- and these aren't the actual

1 numbers and I'm picking them for that reason. But let's  
2 say that Oak Tree had estimated it was going to have  
3 48 percent capacity factor. And instead of achieving  
4 that in some given year -- and let's say that that  
5 equalled 80,000 megawatt hours. I have no idea if the  
6 numbers work out that way, but let's say it did. And  
7 instead of reaching 48 percent they only had 36 percent  
8 so they only produced 60,000 megawatt hours. Wouldn't  
9 they then be paid far less than the \$48,800 if it were  
10 2012?

11 A. They would.

12 Q. And conversely in that same example, if they  
13 produced way over their estimate, say at 60 percent,  
14 they'd be paid way more than the capacity value; is that  
15 correct?

16 A. Correct. You'd hope there would be a correlation  
17 between that capacity factor and perhaps what their  
18 contribution was to the peak loads during those eight  
19 peak days.

20 Q. You would hope.

21 A. You would hope.

22 Q. Would you refer to -- and it could be either  
23 Exhibit BPR 9 or Attachment 9 to your November 21  
24 testimony.

25 A. Okay.



1 Q. And would you walk me through how you went -- and  
2 I'll just pick the first block -- to the 2012 block one,  
3 how you went from the EIPC 49.31 per megawatt hour to the  
4 78.412 per megawatt hour? I just didn't understand how  
5 you got to that calculation.

6 A. Yeah. The EIPC number, unfortunately, were only for  
7 comparison purposes between scenarios that the EIPC came  
8 up with. So, as a result, those numbers are sort of  
9 meaningless. They're what we call mixed dollar values.

10 So some of the inputs that went in were in nominal  
11 dollars. Some of the inputs that went in were in, say,  
12 2009, 2010 dollars. So the output, although useful in  
13 looking at different scenarios, was not necessarily  
14 useful as a market price.

15 And so what I did was took the -- came up with a  
16 scaling factor between the EIA and EIPC and used that.

17 Q. And how did you derive that scaling factor? I guess  
18 that's really what I should have asked in the first  
19 question.

20 A. Sure. So I took -- I first determined what the  
21 average dollar per megawatt hour was. If you look over  
22 on the right side, there's actually three tables on this  
23 sheet. So the first table being the left half of the  
24 sheet, the second table being the top right corner of  
25 the sheet, and the third table being the bottom right

1 corner.

2 And so in the top right corner there's a table that  
3 shows the average dollars per megawatt hour that I had  
4 calculated across each year. So I was taking the EIPC  
5 load blocks and coming up with an annual value.

6 Then I'd looked at the relationship -- as I had  
7 discussed before, looked at the relationship between the  
8 cost -- I think it was the all in cost of electricity,  
9 the regional all in cost versus the U.S. all in cost and  
10 came up with a factor labeled as EIA WNC divided by U.S.

11 And then I took the EIA generation price in dollars  
12 per megawatt hour and multiplied times that factor to get  
13 an EIA -- what I consider to be the EIA generation price  
14 in the West North Central Region.

15 Then using that EIA price I basically took the EIA  
16 price divided by the EIPC average that I had calculated  
17 in that first row to come up with my EIPC scaling factor.  
18 So then I went back to each year and used that scaling  
19 factor for each block.

20 Q. Thank you. I now finally understand how it worked.

21 A. That's why I included the spreadsheet version.

22 Q. Would you refer to Attachment 9 to your testimony?

23 A. The same attachment?

24 Q. Excuse me. Attachment 7. And I gave you -- I have  
25 too many of your attachments open. We've already talked

1 about that one. Excuse me. I'm getting to the right  
2 one.

3 Would you refer to attachment 5 to your testimony.

4 A. Okay.

5 Q. Now these are -- is it correct that these are the  
6 scaling factors that you used initially, the ones shown  
7 on the MAPP\_US line?

8 A. Yes. The highlighted line is the load shape that I  
9 originally used.

10 Q. And it's not the one that you used in your -- in the  
11 exhibits that were offered today.

12 A. Correct. That exhibit --

13 Q. Staff 5?

14 A. Staff 5 used the load shape. And you can see at the  
15 top of Staff 5 I pulled that load shape out, but it's  
16 that MISO\_W Region as you look down the left-hand side of  
17 Attachment 5.

18 Q. And that's shown also as a line on Exhibit BPR 5,  
19 that MISO\_W, Western Region?

20 A. Yes.

21 Q. Okay. Is this load shape based on a single year?

22 A. I believe it is. I believe it's from 2006.

23 Q. Do you have any concern about basing a 20-year  
24 avoided cost load shape on a single year of load shape?

25 A. Yeah. You know, I think as I was saying before, we

1 heard testimony yesterday that NorthWestern's load  
2 shape's going to change over the -- or NorthWestern  
3 believes it's going to change, and I believe it probably  
4 will, over the next 20 years and that energy demand is  
5 going to grow faster than peak demand.

6 And that's why I thought the fact that I came up  
7 with an overshoot was probably a good way to try to  
8 alleviate some of that error.

9 Q. One of my other questions with respect to this load  
10 shape -- and this really only applied to very few of  
11 them, but it did apply to the map one. It also applies  
12 to the MISO West one.

13 At the top it indicates that it is the average load  
14 during blocks relative to the average of the highest  
15 block; is that correct?

16 A. Correct.

17 Q. And it seemed to me that block 1 was supposed to be  
18 the -- the index, I guess. But then -- would you agree  
19 with that?

20 A. Yeah. There's -- there is some relationship to the  
21 top left block 1. So if you look at the ENT region of  
22 block 1 being 1.0 -- because there's some -- there's some  
23 timing involved across the region's coincident peak type  
24 of timing that goes into this.

25 So what I used was rather than use the MISO West 10

1 block being one times the peak demand, I ended up where  
2 you see MISO\_S says 1.058, that was the peak demand. So  
3 then everything else was shifted down from there. So you  
4 didn't actually have 10 hours of your peak and then  
5 25 hours of greater than your peak. You had 25 hours of  
6 your peak and then 10 hours of less than your peak, if  
7 that makes sense.

8 Q. And you basically anticipated my question. I didn't  
9 understand how we could have numbers that were higher --  
10 you know, numbers relative to the maximum that were  
11 higher than 1.

12 But it has to do with the difference in the time  
13 zones; is that correct?

14 A. I wouldn't say time zones. I think the table is  
15 based on a coincident peak time.

16 Q. Okay. Based on your training and experience, Brian,  
17 do you believe that an intermittent resource such as wind  
18 can be a substitute for base load generation?

19 A. No.

20 Q. Is Big Stone base load generation?

21 A. Yes.

22 MR. BROGAN: Mr. Smith, I have no further  
23 questions.

24 Thank you very much, Brian.

25 MR. SMITH: Commissioners, advisors, questions

1 of Mr. Rounds? Or do you want to take a little break  
2 first?

3 MS. CREMER: All I would say is once all  
4 questioning is done before redirect I will need to take a  
5 break so --

6 MR. SMITH: Commissioners, what's your pleasure?

7 CHAIRMAN NELSON: Brian, I want to start with  
8 the same exhibit that Mr. Brogan left off with, BPR 5.

9 THE WITNESS: Okay.

10 CHAIRMAN NELSON: And my question -- first  
11 question is this. As this breaks down the year into hour  
12 chunks, 10 hours, 25 hours, 75 hours, are those chunks  
13 consecutive hours, or are they hours that have the  
14 relatively similar or the same load?

15 THE WITNESS: They're not consecutive. It's  
16 based on the magnitude of the load.

17 CHAIRMAN NELSON: In moving to the -- to using  
18 MISO West. Obviously, you've gotten a lot closer to what  
19 NorthWestern's load shape actually is.

20 Would it be reasonable to simply take 7 percent  
21 off of your numbers to get to where NorthWestern's  
22 starting from, or do you think that would be a mistake?

23 THE WITNESS: The problem with that, I think, is  
24 determining how that comes out of the load shape itself.  
25 Because there's some variations in NorthWestern's load

1 shape that doesn't match up with the average in MISO  
2 West. And I think we saw that that -- the variation with  
3 the MAPP\_US Region is really big. And I assume that it's  
4 pretty close to MISO West.

5 But trying to determine where that variation  
6 lies, I think, would be the difficult part.

7 And then if you did that, you know, like I said  
8 before, I didn't include any sort of load factor increase  
9 over the 20 years, and I don't know how you would add  
10 that into this model.

11 CHAIRMAN NELSON: Did you consider at all taking  
12 the NorthWestern's actually hourly load shape and  
13 converting it to these blocks?

14 THE WITNESS: I wish I would have. I did not do  
15 that.

16 CHAIRMAN NELSON: Okay. I did. And it gives --  
17 it is certainly much closer to what MISO West is but  
18 obviously actually gets very close to where NorthWestern  
19 actually is by converting it to the blocks. But I'll  
20 probably end up talking about that a little bit more at a  
21 later time.

22 Let's talk about your projected load growth of  
23 89 percent. NorthWestern's talking about load growth at  
24 2.25 percent. Significant difference there. Why do you  
25 disagree with NorthWestern's own projection?

1           THE WITNESS:  Actually I don't think that we do  
2 disagree because there's two different types of load  
3 growth we're talking about.  We're talking about growth  
4 in energy demand and growth in peak demand.  And their  
5 biennial plan seems to assume a growth of around  
6 1 percent in peak.  And he's talking about energy demand  
7 growth of 2 and a quarter percent.  I don't speculate as  
8 to what -- well, I guess my model ties it to the peak  
9 demand growth, but I guess I'm admitting that that is an  
10 error with the model.

11           CHAIRMAN NELSON:  And so you wouldn't  
12 disagree -- you know, NorthWestern said their projected  
13 total energy for 2012 is the 1,660,000 figure.  You  
14 wouldn't disagree with using that as a starting base?

15           THE WITNESS:  Correct.

16           CHAIRMAN NELSON:  No further questions.

17           MR. SMITH:  Other Commissioner questions?  
18 Commissioner Fiegen?  Commissioner Hanson?

19           COMMISSIONER HANSON:  Thank you, Mr. Smith.

20           Mr. Rounds, appreciate your testimony.  A lot of  
21 food for thought.  As we go through these processes I  
22 assume that the Commissioners are probably more flexible  
23 than those persons who are giving testimony.  I guess  
24 we're required to be somewhat.

25           I often wonder what goes through people's minds



1 when they're giving expert testimony. Although I've  
2 given expert testimony. You occasionally question what  
3 you're working on and what you presented, and you compare  
4 it with other folks and all of that sort of thing.

5 You've heard the testimony from the others and  
6 the questions and going through the processes yesterday  
7 and somewhat today. Have you changed any of your -- or  
8 questioned any of your thoughts and positions from the  
9 standpoint of, for instance, the floating factor as  
10 opposed to a fixed one?

11 THE WITNESS: You know, when you look at the  
12 floating factor, I think that would be the best solution.  
13 The problem to me is that I don't think -- I think that  
14 would violate PURPA I think you'd probably have a  
15 decision repealed.

16 COMMISSIONER HANSON: When you say the best, do  
17 you mean it's most accurate, or do you mean it's the --  
18 it can't be the best if it's going to be overturned.

19 THE WITNESS: Yeah. You know -- well, the  
20 problem with it is is that Oak Tree is going to have a  
21 hard time finding financing if they don't have a set --  
22 if they're not sure of what they're going to get paid for  
23 their project. And my understanding is that that is one  
24 of the things that PURPA is going after.

25 But as far as, you know, determining the correct

1 avoided cost and capacity for that project, that would --  
2 that would obviously be the best.

3 COMMISSIONER HANSON: What about the -- oh,  
4 let's see here. The accredited capacity percentage that  
5 you used of 12.9 percent. Why not use MISO's own 15.5  
6 percent?

7 THE WITNESS: Yeah. Well, and I had told  
8 Mr. Uda this. And I considered that but the two reasons  
9 that I decided not to was, number one, that number came  
10 out after the February 25, 2011, date. In fact, there's  
11 a new MISO wide number since then that's higher than the  
12 12.9 percent that I could have used as well because it's  
13 more up to date.

14 But also just this -- the idea that I think  
15 probably in the first year, if not the first couple of  
16 years, the capacity is -- should be discounted because  
17 the fact that most wind farms don't seem to reach their  
18 projected capacity factor as a result of maintenance  
19 issues.

20 COMMISSIONER HANSON: Do you feel then that we  
21 are, in fact, locked into the LEO, the time frame from  
22 the standpoint -- establishment from when we're looking  
23 at percentages and such?

24 THE WITNESS: Yeah. Well, that was the  
25 assumption I used, and that was my interpretation of the

1 Commission's decision.

2 COMMISSIONER HANSON: I guess that may be  
3 outside your parameters. I'll wait for the arguments  
4 from the attorneys on that one.

5 Thank you, Mr. Rounds. Appreciate it.

6 THE WITNESS: Thank you.

7 MR. SMITH: Chairman Nelson, another question.

8 CHAIRMAN NELSON: Just one other question.  
9 You've suggested that we should recommend using the  
10 annual cost as opposed to levelized costs.

11 Do you believe that would comply with PURPA?

12 THE WITNESS: I do. I think Oak Tree would  
13 still have assurance of the price they'd be getting.

14 CHAIRMAN NELSON: Thank you.

15 MR. SMITH: Mr. Rislov.

16 MR. RISLOV: Morning.

17 THE WITNESS: Morning.

18 MR. RISLOV: I am curious why your escalation  
19 rate is less than half of what NorthWestern proposed for  
20 capacity. What led you to that 2 and a half percent  
21 escalation rate?

22 THE WITNESS: The 2 and a half percent is  
23 strictly based on the number that Mr. Lauckhart had used  
24 in his original testimony. And I had looked at  
25 NorthWestern's escalation rate and just thought it was

1 high.

2 MR. RISLOV: What does it matter that you have  
3 base load capacity at 200 -- almost 205 MW and  
4 NorthWestern is at 191? Does that affect -- does that  
5 have an effect -- considering what model you used, does  
6 that have an effect on the number of hours they're going  
7 to be in the market versus in base load?

8 THE WITNESS: I'm not sure that it does. My  
9 assumptions or reasons behind that is probably two-fold.  
10 One being that there's probably some times when those  
11 plants are off-line for maintenance, in which case that  
12 would have an effect.

13 And another case, the other case being I assume  
14 they're probably -- there are probably times in which  
15 they'd turn them down somewhat because their load is so  
16 low. And in that case it would not have an effect.

17 MR. RISLOV: I guess I was making an assumption  
18 of reading into your testimony -- correct me if I'm  
19 wrong -- that the way you scaled your load shapes that --  
20 compared to what NorthWestern's projecting for energy  
21 growth versus capacity growth, that that higher base load  
22 number of years might tend to even things out a bit  
23 between yours and NorthWestern's.

24 THE WITNESS: You know, in the case where plants  
25 are off-line -- or are going off-line for maintenance, I

1 think that would be true.

2 MR. RISLOV: We have a fairly wide range of what  
3 the value of a REC would be placed into the avoided cost.  
4 What is your opinion on that?

5 THE WITNESS: Honestly, I didn't think RECs were  
6 worth discussing at hearing today. I thought we made a  
7 decision back in March that NorthWestern does not have --  
8 does not have a need for RECs.

9 That being said, I'm pretty familiar with the  
10 REC market in the region, being that I'm on the board of  
11 directors of the Midwest Renewable Energy Tracking  
12 System, which tracks most of the RECs within MISO.

13 And my understanding is the cost is currently  
14 less than a dollar. And I don't remember any time in the  
15 last couple of years that it was greater than \$3.

16 MR. RISLOV: Thank you.

17 MR. SMITH: Can I ask one question, Brian?

18 THE WITNESS: Yes.

19 MR. SMITH: In terms of reliability  
20 coordination, which reliability agency is NorthWestern  
21 in?

22 THE WITNESS: I believe it is MRO. Regional  
23 entity?

24 MR. SMITH: Yes. So if we view one contribution  
25 to avoid a need for additional capacity as being meeting

1 the reliability standard for excess capacity to meet the  
2 LOLE, might it not make sense to use the accreditation  
3 factor for resource adequacy purposes that the  
4 reliability organization that it's a member of uses?

5 THE WITNESS: You're going to have to restate  
6 that question for me.

7 MR. SMITH: Well, because one element of need to  
8 construct is the need to meet the -- you know, the  
9 reserve capacity requirements of the reliability  
10 organization. And it lessens that need if you have  
11 additional capacity.

12 Would it not make sense to use the capacity  
13 value that the reliability organization specifies for a  
14 resource?

15 THE WITNESS: Yeah. And that's what I was  
16 referring to as the market price. Because usually you'll  
17 have -- you'll see even though utilities maybe build  
18 generation to assure there are no brownouts, you know, as  
19 a result of Section 204 there are actual technical  
20 requirements that the regional entities push on the  
21 utilities.

22 In that case they end up buying carrying  
23 capacity on the market. And that's what I'm basing my  
24 price off of.

25 MR. SMITH: I'm not so much getting at price as

1 I am contribution factor.

2 THE WITNESS: Yeah. I think --

3 MR. SMITH: In other words, like MISO gives you  
4 12.9, and MRO doesn't use that.

5 THE WITNESS: My understanding was that MRO  
6 actually uses MISO to determine that percentage.

7 MR. SMITH: Okay. Maybe that's the question.  
8 Are they now using the MISO value or not?

9 THE WITNESS: I won't say that I'm an expert in  
10 that or that I know for sure, but that's my  
11 understanding.

12 MR. SMITH: Okay. Thank you. And if they  
13 weren't, if they were using a different value, would that  
14 be the appropriate value to use?

15 THE WITNESS: Probably. I'm -- the problem is  
16 I'm not aware that MRO is coming up with their own  
17 capacity factors for wind. So that's why I used MISO  
18 because I thought it was -- it's well thought out, and  
19 it's vetted by a pretty large stakeholder group.

20 MR. SMITH: Yeah. And I don't recall anywhere  
21 really seeing a definitive thing on how that's working  
22 these days. So thank you. I thought maybe you knew.  
23 Okay. Thanks.

24 Are we going do take a short break before we  
25 continue on?

1 MS. CREMER: And I need to talk to Mr. Rounds  
2 before we redirect.

3 (A short recess is taken)

4 MR. SMITH: It's that point in time we'll call  
5 the hearing back to order following recess. And I think  
6 what we'll do now is -- do you want to go now, or should  
7 I let them respond to Commissioner questions first and  
8 give you the last shot?

9 MS. CREMER: Yeah. You're right.

10 MR. SMITH: Mr. Brogan.

11 REXCROSS-EXAMINATION

12 BY MR. BROGAN:

13 Q. Brian, I have two short ones that were triggered by  
14 some Commission questions.

15 A. Sure.

16 Q. You were asked if it would be appropriate to use the  
17 MISO zonal capacity as opposed to the system wide average  
18 for Oak Tree in its first year.

19 Is it your understanding that MISO uses a system  
20 wide capacity credit and not the zonal capacity credit  
21 for wind generation that does not have any production  
22 history?

23 A. I'm not sure right now if -- at this point if  
24 they're using the zonal number or not for the initial  
25 year.



1 Q. And then you were asked about REC value, and you  
2 commented about some REC values that you're familiar  
3 with. Is that for RECs that are registered and tracked  
4 by the Midwest Renewable Energy Tracking System?

5 A. Those -- I would say that's for RECs in this region.

6 Q. Okay.

7 A. Tracked by MRTS, Midwest Renewable Tracking System,  
8 and other systems like Greedy. Greedy is the voluntary  
9 tracking system nationwide that seems to be most  
10 popular.

11 MR. BROGAN: Thank you.

12 MR. SMITH: Mr. Uda.

13 RECROSS-EXAMINATION

14 BY MR. UDA:

15 Q. Just I think one follow-up question in response to a  
16 question that -- the same line of questioning that  
17 Mr. Brogan just asked you about.

18 The values that you're talking about, are those  
19 long-term REC contracts, or are those short-term values  
20 that are being traded in the market and reported?

21 A. Those are the current market prices.

22 Q. Okay. And do those current market prices reflect,  
23 for example, contracts between utilities that have to  
24 meet renewable portfolio goals or obligations and third  
25 parties, or do they just reflect sort of market

1 transactions in the short-term?

2 A. You know, a lot of the transactions you don't see  
3 because it's either a utility consuming their own RECs or  
4 else transactions that are kept confidential. I think  
5 most of the numbers are probably coming from the actual  
6 marketers who sort of act as a middleman within MRTS and  
7 Greedy.

8 Q. So just so I'm sure I understand, do you know what  
9 the length of these agreements are?

10 A. It's not typically a length. It's typically I have  
11 a bank of RECs, and I'd like to sell them to you at this  
12 price.

13 Q. Okay. So it's kind of a current market evaluation?

14 A. Yes.

15 MR. UDA: Okay. No further questions.

16 MR. SMITH: Ms. Cremer.

17 MS. CREMER: Thank you. We have no redirect.

18 MR. SMITH: Okay. I think you may step down  
19 then, Mr. Rounds.

20 You may call your next witness, Ms. Cremer.

21 MS. CREMER: Thank you. Staff would rest.

22 MR. SMITH: With that then, Mr. Brogan, we'll  
23 turn to NorthWestern. Rebuttal.

24 MR. BROGAN: Mr. Smith, NorthWestern calls no  
25 rebuttal witness.

1 MR. SMITH: Thank you. Mr. Uda.

2 MR. UDA: Thank you, Mr. Smith. We would call  
3 J. Richard Lauckhart to the stand.

4 THE WITNESS: I was expecting another quick  
5 short break before we got called to the stand so can we  
6 take a quick, short break?

7 MR. SMITH: Yes.

8 (A short recess is taken)

9 MR. SMITH: Proceed when ready, Mr. Uda.

10 MR. UDA: Thank you, Mr. Smith. And I assume,  
11 Mr. Lauckhart, you've taken care of whatever problem that  
12 you had before.

13 THE WITNESS: I'm not going to answer that.

14 MR. UDA: May I treat the witness as a hostile  
15 witness?

16 DIRECT EXAMINATION

17 BY MR. UDA:

18 Q. Thank you, Mr. Lauckhart. You've been previously  
19 sworn. And as the preface to your rebuttal testimony  
20 live here today, would you -- and, I mean, briefly  
21 summarize your initial proposal before you elaborate on  
22 any additional observations or criticisms that you might  
23 have of either NorthWestern or Staff's proposal in this  
24 case?

25 A. Yes. As you recall, I've pointed out in my earlier

1 testimony in this proceeding, this second phase of the  
2 proceeding, that there's a lot of uncertainty in  
3 forecasting avoided cost. And I believe that you should  
4 look at a range of possibilities, consider what the  
5 reasonable range is, and then come out somewhere in the  
6 middle of that.

7 That's been my proposal, and that will continue to  
8 be my proposal maybe with some adjustments of what might  
9 be in that range.

10 Q. Okay. And in your original proposal what was the --  
11 what was the range that you used to come up with a  
12 midpoint alternative?

13 A. The range was -- I don't have it exactly here, but  
14 it's in my testimony, somewhere between like 52 and 85 or  
15 something to that effect was the range.

16 Q. Okay. What was the average you came up with?

17 A. 69. About \$69 a megawatt hour.

18 Q. And did that presume that RECs would be transferred  
19 to NorthWestern?

20 A. Yeah. That assumed that RECs that had a 20-year  
21 levelized value of 7 and a half dollars would be  
22 transferred to NorthWestern.

23 Q. Okay. And so without the RECs being transferred to  
24 NorthWestern, what was that -- what was that rate?

25 A. It would be the 69 minus the 7.5.

1 Q. And you've sat through the testimony, the  
2 presentation of exhibits, cross-examination, and redirect  
3 over the last two days. Did you have any observations or  
4 other comments that you would like to provide to the  
5 Commission with respect to the NorthWestern proposal in  
6 this case?

7 A. Yes. We heard -- and we've read the testimony and  
8 we heard the testimony yesterday about NorthWestern's  
9 proposal in this case. It's a price, a single price.  
10 They haven't talked about a range. A single price.

11 I have significant concerns about that. I'll try to  
12 briefly go through them here. Mr. Lewis developed a  
13 forecast of market prices for them to use in their hybrid  
14 model. His market prices originates from a publication  
15 by Argus. It's a copyrighted, by the way, publication by  
16 Argus, but apparently they think it's okay for us to talk  
17 about it here. Whether we can get it outside for other  
18 purposes, I don't know.

19 The publication indicates that assessments of the  
20 future price strip are made if no trades are going on.  
21 And the assessments appear to be some expert sitting in a  
22 room thinking about these things, taking various things  
23 into account, and writing down a number. That's not the  
24 market trade happening.

25 Mr. Lewis gives you the impression that there's a

1 massive amount of trading going on out there. I've got  
2 to tell you that isn't happening. There's no evidence in  
3 this proceeding that there's any volume being traded in  
4 these products that he's using. There's no evidence in  
5 this proceeding.

6 And I can tell you as a matter of fact that back in  
7 the late '90s, early part of this last decade, there were  
8 entities that said, hey, this is going to be a great  
9 money-making business. We're going to get in there.  
10 We're going to speculate. We're going to do trades. And  
11 those entities after about four years of losing money  
12 closed shop. And those people went someplace else.

13 So who is trading in this? Well, they'll say the  
14 utilities are trading because they need to do some  
15 hedging. Well, if you followed what's happened across  
16 this country with utilities' hedging activity, the  
17 hedging was very popular when prices were going up. When  
18 prices came down they said, well, why did you lock in  
19 that price for that quantity? That was a stupid idea  
20 because you could have just waited.

21 So most of the utilities have bagged their hedging  
22 activity. Who is trading in these products? The answer  
23 is almost nobody.

24 There's no evidence in this proceeding that this  
25 Argus stuff had any trades behind it. It was an

1 "assessment." His forecast gas price came from somebody  
2 else. By the way, Argus, actually --

3 These assessments have no volume traded behind them.  
4 Argus does the assessments both for electricity and gas.  
5 And you would think, well, at least maybe those guys are  
6 talking to each other when they put out their  
7 assessments, the gas guy and electric guy.

8 But Mr. Lewis doesn't purchase the Argus gas  
9 publication so he doesn't get a consistent gas electric  
10 assessment. For his gas he goes to ICE. Now once again,  
11 he got a data dump from ICE and went there -- future  
12 strip was back in the time, but it included no  
13 information on volume.

14 And Mr. Lewis claims he doesn't know how ICE does it  
15 for their gas when there's no volume being traded. He  
16 assumes this assessment was made similar to what Argus  
17 has said they do.

18 Now Mr. Lewis takes the Argus assessment, and he  
19 reduces that by 4 and a half dollars a megawatt hour.  
20 Based on his view the history of LNPs between sort of the  
21 Illinois point up and here closer to where we are in  
22 South Dakota in this back time period there was a 4 and a  
23 half dollar LNP difference.

24 Well, we know that one of the major purposes of the  
25 LNP approach was to send price signals, locational

1 marginal price, was to send price signals about  
2 locations. And the only reason there would be a price  
3 differential in the MISO analysis is because of  
4 congestion or losses.

5 Mr. Lewis kept talking about wheeling charges, but  
6 they don't have wheeling charges. It's congestion and  
7 losses.

8 Now if there's 4 and a half dollars, that's  
9 primarily just by congestion because that seems like it  
10 must be mostly congestion because losses isn't going to  
11 be a big part of this. If it's mostly congestion and  
12 there's a 4 and a half dollar price difference here,  
13 somebody ought to look to see what's causing the  
14 congestion. Is it just like one little span of wire  
15 between here and here that if we re-conductor that, we  
16 can eliminate most of that congestion?

17 Mr. Lewis assumes this 4 and a half dollar price  
18 signal is not going to cause anybody to do anything  
19 differently over the next 20 years. I think that  
20 assumption is suspect, at best.

21 Q. Let me stop you there, Mr. Lauckhart, just briefly.  
22 When you say caused somebody to do something different,  
23 what do you mean by that?

24 A. I'm saying causing somebody at MISO, maybe the  
25 transmission planning guys at MISO saying, hey, we ought



1 to look at solving this particular congestion problem.  
2 Let's put together a plan and next year we'll go out and  
3 build some transmission and greatly reduce or hopefully  
4 eliminate that congestion.

5 Q. Okay. So in your judgment this 4 and a half dollar  
6 difference between the Northern Illinois delivery point  
7 LNP and the Big Stone plant LNP, is that an appropriate  
8 reduction to a calculation of avoided cost?

9 A. Well, if we're talking about a 20-year forecast of  
10 avoided cost. That 4 and a half dollar adjustment in my  
11 mind assumes that price signal never causes anything to  
12 happen over the 20 years. I don't think that's a good  
13 assumption.

14 Now Mr. Lewis then needs a market heat rate. So he  
15 takes his adjusted Argus price and divides it by the ICE  
16 assessment based price, and he gets a market heat rate.  
17 And he says it's about 8,000 on the heavy load hours and  
18 5,000 on the light load hours.

19 Well, at 5,000 on the light load hours no gas plant  
20 would ever operate on the light load hours. Now he's  
21 saying, well, some of them might operate. They take a  
22 little loss because they're going to have to do the  
23 startup and shutdown costs. That's a huge loss. 7,000  
24 heat rated plant and \$5,000 market heat rate. That's a  
25 big loss.

1           Maybe some would take it. I think it's going to be  
2 hard for many people to take that kind of loss. They're  
3 going to want to start up and shut down if they can't  
4 operate profitably on the heavy load hours.

5           Well, he's got an 8,000 heat rate on the heavy load  
6 hours. No peaker will ever operate on the heavy load  
7 hours. And a gas plant combined cycle may -- they could  
8 make a little money there, but they've got to recover the  
9 startup and shutdown costs.

10           If you think about it, well, he's going to say there  
11 will be a couple hours it will be higher than that, this  
12 is an average. Okay. But if you think about it, his  
13 view of the future is very little gas operating in this  
14 region.

15           So, well, that's not very consistent with what  
16 people are thinking. We're moving through gas, you know.  
17 But his view he would say, well, that gas isn't going to  
18 be profitable.

19           Now in my initial testimony the material part of  
20 last year I presented the Black & Veatch Fall of 2010  
21 Forecast. And there was concern that the gas prices in  
22 that forecast were not current enough. And so, you know,  
23 we moved on to this thing.

24           Nobody expressed the fact that the market heat rates  
25 in that forecast were not done right. It was a

1 fundamental based price forecast, and we developed market  
2 heat rates just so people, other people, could -- if they  
3 wanted to, take their gas price, kind of a short cut in  
4 our view, and run it through that market heat rate.

5 That market heat rate was available on page 221 of  
6 that slide deck. And I would urge you to open up that  
7 slide deck. Not at this point in time probably but  
8 sometime and compare those market heat rates with  
9 Mr. Lewis's market heat rates. There's a world of  
10 difference. I believe Mr. Lewis's market heat rates are  
11 not legitimate.

12 Now in the second phase hearing -- I was going to go  
13 on and talk a little bit about the hybrid methodology of  
14 NorthWestern.

15 Q. Mr. Lauckhart, would you please explain any concerns  
16 you might have with respect to NorthWestern's calculation  
17 in this latter part of the proceeding with respect to the  
18 hybrid methodology?

19 A. Thank you. Thank you for that question. In this  
20 second phase of the hearing NorthWestern has chosen to  
21 modify the previous analysis it did for the hybrid  
22 methodology. So, you know, there's -- there's the  
23 concept, principal hydro methodology, and then there's  
24 the devil that's in the details of how you actually do  
25 it.

1           And they decided to do it differently this time.  
2           And one of the things that we heard from Mr. Green is,  
3           well, we decided to put a load growth in there, and when  
4           he was -- when he was -- and he said and that would put  
5           more stuff in the market. That will put more stuff in  
6           the market. Mr. Lewis said, well, would you believe that  
7           your stuff -- industry has less stuff in the market? And  
8           he said that is not intuitive I think was his word.  
9           That's not intuitive. That makes -- I don't understand  
10          how that happened. Mr. Green said that.

11          But we were able to demonstrate that their new  
12          methodology puts a lot less in the market. Well, the  
13          other thing that I don't think Mr. Green was aware of is  
14          NorthWestern decided that instead of using the actual  
15          generation on every hour when they did the comparisons,  
16          the low grade, they decided to put just an average  
17          generation on every hour.

18          Well, and Mr. LaFave said, you know, I don't know  
19          which way that moved it. Could have moved it up. Could  
20          have moved it down. I think the evidence is clear it  
21          moved it down substantially by doing that.

22          We know intuitively the low forecast should have  
23          moved it up. What moved it down? Well, that was one  
24          change he made. And it's been moved down quite a bit.

25          In my view coal plants, while they aren't varying as

1 much from heavy load hours and light load hours as some  
2 other kind of plants, they generally operate lower in the  
3 light load hours. Maintenance is scheduled in the light  
4 load months.

5 If you have a tube leak in a coal plant, which  
6 means, you know, that steam tube got a hole, it's going  
7 into the boiler, you don't have to shut it down right  
8 then. If the prices are good and it's heavy load, you  
9 need it, you will delay the maintenance until the evening  
10 and then you will shut it down and you'll work to solve  
11 that tube leak to try to get it back up by the next  
12 morning.

13 So I believe this concept maybe it's simpler  
14 mathematically to just assume it's flat every hour, but  
15 it's not realistic.

16 So without belaboring these other points, you know,  
17 I don't think that their analysis, their avoided cost  
18 that they put in, the 37.99, is legitimate. And clearly  
19 far outside of the range of what I think is a reasonable  
20 number.

21 Q. And what was that number, Mr. Lauckhart?

22 A. It was 37.99 a megawatt hour.

23 Q. Now I want to ask you a bit about Staff's  
24 November 21 testimony and the exhibits provided by  
25 Mr. Rounds a couple of days ago. Do you have any

1 observations or analysis that you'd like to provide to  
2 the Commission at this time with respect to that  
3 testimony and those exhibits?

4 A. Yes. As you recall, I thought his price forecast  
5 was the reasonable one, as he says. You know, there's no  
6 perfect price forecast for electricity, market price  
7 forecast. But I thought his was a reasonable one.

8 I am not suggesting that that needs to be changed  
9 even yet, even after all his testimony we've heard. But  
10 what does bother me is when I provided my testimony, my  
11 responsive testimony on November 28, I pointed out all  
12 the reasons why a \$20 a kilowatt year peak capacity price  
13 was not appropriate. And all the reasons why instead  
14 based on the history we have here and the knowledge we  
15 have here that the Aberdeen gas turbine would be the  
16 appropriate basis for a capacity price.

17 Now what bothers me is Mr. Rounds put no testimony  
18 in as to why that was done in the responsive time period.  
19 And then a day ago, a day and a half ago, we get a new  
20 exhibit from him, and he says, well, I modified it  
21 because Oak Tree said it was wrong. And he modified by  
22 putting in \$20 a kilowatt year growing at 2 and a half  
23 percent a year.

24 Well, that's nowhere near the Aberdeen price. So  
25 he's given us really -- until we heard it today, he's

1 said, you know, I didn't think the Aberdeen was avoidable  
2 by Oak Tree so I decided to do this.

3 Well, it turns out he's -- he referenced as we heard  
4 something in the brief from last -- and it turns out it  
5 was a brief referring to a contract that was signed well  
6 after February 25. So we're violating our own rules  
7 here.

8 And, by the way, that contract was not a 20-year  
9 contract that started out at a price and grew at 2 and a  
10 half percent a year. If I recall, it was a two-year  
11 contract. And we're valuing a 20-year capacity value on  
12 a two-year contract?

13 So I would recommend that we should really rerun his  
14 model, replace his \$20 with \$141, which is Aberdeen, the  
15 cost of Aberdeen.

16 And also it bothered me that he had used a 12.9  
17 percent as had NorthWestern in the November 21. I  
18 provide a lot of testimony on November 28 why that was  
19 not appropriate. And he put no responsive testimony in  
20 to it.

21 We talked about it today a little bit why he thought  
22 it was. But no responsive the 28th and he left 12.9  
23 percent in his model when he redid it.

24 Now there were a couple of things that were  
25 interesting on this fact. We heard today that, well,

1 maybe one of the 129 points is the Titan project. And  
2 maybe we could actually go find which of the projects was  
3 the Titan project and we could go back into the time  
4 frame of February 2011, get the most recent MISO study,  
5 find out which was Titan, and we'll say that's it.

6 Because Titan is not getting 12.9 percent. Titan is  
7 getting something else. And as this Commission has  
8 already acknowledged, Oak Tree and Titan are very  
9 similar. Location, technology. You know, maybe Oak Tree  
10 is a little bit better in technology, but they're very  
11 similar. Why should Oak Tree get less capacity credit  
12 than Titan?

13 And if we can find it in the MISO study, we all  
14 think the MISO method is good. If we can find it in  
15 there, let's use it. Should be able to. We tried to  
16 find the names of those 129 plants in the study, and you  
17 have to be a market participant, "market participant"  
18 under the definition by MISO to get that data.

19 Well, I'm not a market participate. I can't get  
20 that data. But it seems to me somehow through this group  
21 somebody could find a way to find out if Titan is in  
22 there, what the number was now barring that there were  
23 two other things we knew at the time.

24 NorthWestern itself was calculating what it thought  
25 was the capacity contribution of Titan at that time



1 frame. And we heard 20 percent was accounted in the  
2 first year. NorthWestern itself calculated 20 percent  
3 for Titan at that time. Why would we use an average if  
4 across the whole MISO system of 12.9 percent when it  
5 ranged from negative something all the way up to 32 when  
6 we know that NorthWestern at least calculated Titan at  
7 20.

8 So now we have two points. We could actually go to  
9 the actual -- the MISO data and find out which point and  
10 use it, or we could use the 20 percent that NorthWestern  
11 provided. Or the MRO -- as I testified back last year,  
12 Midwest Reliability Organization itself had put out a  
13 publication that they thought 20 percent for wind made  
14 sense in their geographic footprint.

15 So in my mind there's two things to say. 20  
16 percent. And maybe if we don't want to do that, we can  
17 go find this stuff from the MISO study and figure out  
18 what it is. Use it. But to just use 12.9 percent even  
19 after we've talked about all the reasons you wouldn't,  
20 bothers me.

21 Q. Can I ask you, Mr. Lauckhart, if the correct loads  
22 have been used in either NorthWestern's study or in  
23 Staff's study in this proceeding?

24 A. Yes, you can ask me that.

25 Q. Okay. Well, I did, I think.

1 A. I will answer that. Sorry. We've been spending too  
2 many nights at the bar.

3 In our view if you want to know whether you're going  
4 to have to displace the coal when you bring another  
5 resource like Oak Tree on, if you want to know do I have  
6 to displace coal if I bring them on or can I -- you know,  
7 will I be in the market?

8 Okay. That's kind of the question. Do I bring this  
9 on? Well, they have to start displacing coal because my  
10 coal is greater than my load.

11 Well, I would say, well, what is your load you're  
12 trying to serve? Well, you've got your retail load. Do  
13 you make any off system sales? Do you make any wholesale  
14 sales?

15 Well, let's go back and look at historically and  
16 see, well, do we? We're looking at the historical retail  
17 loads. Do we make any off system wholesale sales? And  
18 the answer is yes. A substantial amount, as evidenced by  
19 the FERC Form 1. 220,000 megawatt hours in the year  
20 2010.

21 Well, when we decide if we think we're going to have  
22 to back down coal and we're going to look at the  
23 historical retail load, wouldn't we also add in the  
24 historical wholesale load? Because we're actually  
25 serving that. And if we're actually serving that and we

1 don't have to back down the coal plant, why don't we  
2 acknowledge that?

3 Is there something in the document that says how to  
4 do the hybrid methodology that you don't acknowledge  
5 that?

6 Q. Do you have a comment about the comparison between  
7 what Staff originally had in their November 21 testimony  
8 and Mr. Rounds' later exhibit that adjusted those numbers  
9 downward?

10 A. Yes. You know, one of my comments is what  
11 generation should we be putting in? Mr. Rounds claims he  
12 put in the name plate capacity which really assumes the  
13 things have 100 percent availability factor. And then he  
14 acknowledged, well, they really only have 80 percent  
15 availability factor. And at least NorthWestern they  
16 reduced it to the availability factor.

17 Now, as I said, they also didn't put it in the right  
18 shape. They put it flat, as did Mr. Rounds. But the  
19 other thing that I tried to point out is as of February  
20 2011, people knew that Big Stone and Neal 4 had to be  
21 shut down by 2016 unless significant money was spent.  
22 There was no decision at that time to spend that  
23 significant money.

24 So when we were doing this hybrid methodology and  
25 we're showing what the base load is going to be, why

1 wouldn't we take out Big Stone and Neal 4 in 2016? So I  
2 believe that's a rational thing to do under the hybrid  
3 methodology.

4 And I have actually taken Mr. Rounds' spreadsheet  
5 analysis he gave us two days ago, and I made four changes  
6 that I've talked about.

7 Q. And could you identify what those four changes  
8 were?

9 A. Yes. I changed the first year load to be 1,660  
10 million megawatt hours of retail load plus 220,000  
11 megawatt hours of wholesale load. So I made that change  
12 to his first year. And then he has growth in there and  
13 that happened.

14 The second change is I left his 204 megawatt name  
15 plate capacity in as the generation that could be  
16 available for base load through the year 2015, and then I  
17 reduced it to 52. Which is how much that would drop if  
18 their share of Big Stone and Neal 4 went away.

19 And then I put the capacity contribution at  
20 20 percent, and I put the cost of capacity at \$141 a  
21 kilowatt year and reran his model. Everything else I  
22 used his model.

23 Q. What was the result of that rerun of Mr. Rounds'  
24 model?

25 A. I get -- depending if you start in 2013, I get

1 \$60.38, and if I start in 2014, I get \$62.08.

2 Q. Okay. Let's back up a minute. Why would you take  
3 Big Stone and Neal out of the generation figures from  
4 Mr. Rounds' analysis?

5 A. Well, it's simply because they knew at the time  
6 unless they spent significant money, they had to shut  
7 those down. And at the time there had been no decision  
8 to spend that significant money.

9 I'm not sure there's been a decision today. But at  
10 that time certainly there hadn't been a decision to spend  
11 that significant money.

12 Q. Okay. So, in your opinion, are the improvements,  
13 the upgrades to Big Stone and Neal 4, were they an  
14 avoidable cost at the point of February 25, 2011?

15 A. Well, you're slipping a little bit into a different  
16 topic here, I think. But all I'm saying here is they  
17 knew they had to shut them down if they didn't do  
18 something. Certainly they had the capability to shut  
19 them down.

20 Q. Now circling back to your original proposal, do you  
21 have any additional changes or recommendations for the  
22 Commission's consideration at this time?

23 A. Yes. I think we have at least two more alternatives  
24 we could throw on that list. I had 10. We could put two  
25 more. We could put Mr. Rounds' numbers that he developed

1 two days ago, which he testified to today as another  
2 possibility.

3 You could put the numbers that I did with the four  
4 modifications I made to his thing and put that in as  
5 another one.

6 In both of these cases, Mr. Rounds and mine, you  
7 would have to add the 7 and a half dollars REC value if  
8 you want NorthWestern to have the RECs. If you don't,  
9 then you don't have to make that addition.

10 But to compare with my other ones, I had the RECs  
11 all going to NorthWestern in my table, and so the  
12 averages are done with them in there. You could take  
13 them all out and get another average.

14 Q. Okay. And in your original proposal on November 21,  
15 2011, when you looked at these 10 cases, do you have any  
16 response to the criticism of the cases that you chose  
17 from the EIA 2010 forecast?

18 A. Yes. So a couple of things, criticisms that I  
19 received for my selection of five cases from the 2010  
20 filing.

21 Remember, by February 25, 2011, we had the early  
22 release from the EIA for 2011. And the first thing I'd  
23 point out and we read it into the record is even the EIA  
24 said, you know, there's a lot of uncertainty here. Don't  
25 just look at our early release and decide that's where

1 things are going. You need to look at all of our 30  
2 cases, get a robust understanding where this energy  
3 market might be going.

4 Well, of course, we didn't have the 30 cases that  
5 they suggested we look at. But we did have the 30 cases  
6 that had been done six months earlier. And I suggested  
7 that to be consistent with the caution provided to us by  
8 EIA, we should actually look back at some of those too.

9 And then I, of course, picked five of the 30 and  
10 actually put them on my table, thinking that they were  
11 good, five indicative ones to include in the range. And  
12 I was criticized, well, they didn't like the ones I  
13 picked.

14 And I actually showed in my testimony if somebody  
15 else wanted to pick a different one, here's how you get  
16 the price. Here's how you find the case. This is how  
17 you get the price. This is how you put them in the  
18 spreadsheet. You can get a new number.

19 But Mr. Lewis just said I don't like the five you  
20 picked. Look at the 30. Well, did he mean we should  
21 equally weight all 30? We could do that. Right? We  
22 could take all 30 of those, the prices, we could put it  
23 in my spreadsheet, and we could make our sample, you  
24 know, 25 longer if we wanted to. Maybe that's what we  
25 ought to do.

1           Or we could think about, well, let's just think  
2 about these 30 cases. What's in them? Which ones do we  
3 think are the rational ones that we should include in our  
4 sample and which ones not?

5           You know, he criticized me for only taking five  
6 cases, those five cases, but he didn't suggest which ones  
7 should be taken, and he didn't really run the numbers.

8           So, anyway, I still think the five cases are useful.  
9 I think they're legitimate. If this Commission wants to  
10 take some of those other cases, you've got my model.  
11 I've told you how to do that. You could do that. You  
12 could add more cases in there. Throw ones out I put in  
13 there if you thought they're not appropriate for whatever  
14 reason. So that could be done.

15 Q.    Okay. So was one of your cases that you used in  
16 your November 21, 2012, testimony an avoided cost  
17 analysis based on the cost of replacing the Big Stone  
18 plant?

19 A.    Yes. So this has got a lot of confusion in my mind  
20 in this proceeding. Is the Big Stone plant avoidable?  
21 Is it not? Well, is it avoidable by Oak Tree or is it  
22 not?

23           In my mind, the way to think about this is as  
24 Mr. Uda's talking to Mr. Rounds about this is, well, is  
25 it possible to replace the entire Big Stone plant with



1 purchase power? And I have to say definitely possible.  
2 The only question is what is the price?

3 In my prior life at Puget Sound & Light we were  
4 short on power, a lot of power. We lost some resources.  
5 We were short on a lot of power. And we looked at well,  
6 we'd have to build this, build this, and build this. And  
7 I said, well, why wouldn't we consider purchasing power.

8 So we went out for an RFP, and we got a massive  
9 amount offered to us. You start looking through these  
10 responses, you know, where is the power coming from?  
11 Well, this guy over here, he has a power plant that he's  
12 only got -- sold it 50 percent firm, and he'd be happy to  
13 sell it to you.

14 This guy over here has said, you know, I've got  
15 excess power on my system that -- most of the time. I  
16 will sell you this stuff except for a couple of hours of  
17 the year I won't. Okay. Well, somebody else will say,  
18 well, I'll sell you capacity for a couple of hours a  
19 year. And somebody else will say I'll build you a brand  
20 new plant. To tell you the truth, I won't sell you power  
21 off the market. I'll get it -- I will commit to get it  
22 to you for X number of years, and then I will build the  
23 plant if necessary to make sure you get your power.

24 So there were all of these complicated things that  
25 we were dealing with, and at the end of the day we put

1 together a package to purchase power.

2 Now that was back in the '90s. I have been doing  
3 consulting now since the year 2001. And very recently  
4 we're doing some major consulting jobs. I'm retired from  
5 Black & Veatch now, but I'm kind of on retainer with  
6 Black & Veatch, and we're doing major consulting jobs for  
7 utilities in the Midwest faced with the same issue.

8 One difference: They have 1,500 megawatts of coal  
9 that they have to deal with, not 500. And a serious  
10 alternative they're looking at is purchased power.

11 So in my view to say purchased power isn't an  
12 alternative is not being realistic. The question is what  
13 is the price?

14 So I think in that -- in that stack of stuff from  
15 the engineering firm, which was --

16 Q. Burns & McDonnell.

17 A. -- Burns & McDonnell, there should have been another  
18 column there, purchased power. Why wasn't there? Did  
19 the joint owners tell them don't put that column there?  
20 Why wasn't that column there?

21 It should at least be there and some study done on  
22 could you get purchase power and what would be the  
23 price?

24 Now that's how we tie into this proceeding. Well,  
25 wait a minute. We're trying to forecast the cost of

1 purchase power here. If you can buy purchase power at  
2 \$37.95 a megawatt hour flat for the next 20 years, that  
3 looks pretty good compared to the \$74 cost to fix up  
4 Big Stone.

5 Well, I don't think anybody really believes you can  
6 buy 37.99 for the next 20 years capacity and energy.  
7 Fixed price, next 20 years. That's why that wouldn't be  
8 legitimate in that comparison. So that's a bogus number.  
9 How did you do that?

10 So I'm saying, well, but some of the other things in  
11 that range that we have, there are some things that I  
12 believe are reasonable numbers. And some of those things  
13 are up in the range of what it would cost to redo that  
14 power plant.

15 So if you actually say, well, look, purchase power  
16 we think we can get for \$70, \$74 a megawatt hour. Okay.  
17 It's just a trade-off. Do we want to do the coal plant,  
18 or do we want to do the purchase power?

19 I don't really care how that goes. My point is the  
20 avoided cost for Oak Tree is \$74 when you do that. Just  
21 a tiny little thing. That's the avoided cost.

22 Q. So you're not suggesting, Mr. Lauckhart, that  
23 Oak Tree is in any sense a substitute or replacement for  
24 Big Stone; is that right?

25 A. That's right. Clearly it's not. Right.

1 Q. Okay. And so what you are suggesting is that it at  
2 least makes sense to study the market purchase  
3 alternative to Big Stone; is that correct?

4 A. Right. So figure out is there a market purchase  
5 alternative out there? And I'd say there definitely will  
6 be. The only question is what is going to be the cost of  
7 that market purchase alternative?

8 Q. I have a series of questions based on testimony and  
9 questions we've heard today that I'd like to ask you  
10 about. Could you explain or discuss with the Commission  
11 the relative merits of a levelized rate as opposed to a  
12 partially levelized rate or an annual rate?

13 A. Yes. So this has been a pretty important part of  
14 the PURPA world. When I was at Puget we had a very low  
15 first year avoided cost. We were long on power. We  
16 don't need much power. But there's an avoided cost  
17 there. \$20 sort of the market.

18 But, you know, five years out we needed a brand new  
19 plant. Right? We needed to build another coal plant  
20 because the market we felt was not only going to be there  
21 for the next five years and then we're going to have to  
22 do something.

23 The market price was going to go up so fast that the  
24 smart thing to do at that time would be build a plant,  
25 but, of course, it costs -- its first year costs is more

1 than the market, but over its life it levelized out lower  
2 than the market.

3 So you could say, well, we had a nice stream of  
4 avoided costs, 20, 20, 25, 25, 80, 80 cents, you know,  
5 like this. And so a guy would come in and say I'd like  
6 to sell you a 20-year deal at avoided cost. I said,  
7 well, the first year is 20. They said, well, the bank  
8 gets nervous when I say we only get 20 the first year.  
9 So could you levelize that a little bit.

10 Well, you mean, like flatten it out completely? You  
11 know, we think as Mr. Rounds says there's a bit of a risk  
12 here if you just flatten it out completely. You know,  
13 we've now paid you too much if you don't perform at the  
14 end. Well, there was a couple of solutions that were  
15 brought up.

16 The intent wasn't to just make it so difficult that  
17 the QFs couldn't finance. That wasn't the purpose here.  
18 We were trying to encourage these guys. And we said,  
19 well, if you actually do it over the 20 years, we're  
20 happy to give you the levelized equivalent price.

21 But so -- we think, well, maybe you can put up  
22 security; right? We'll calculate how much our  
23 overpayment to you was if you do it levelized, you know,  
24 for the first 10 years, but -- six years in that case and  
25 starting then you start eating away at it. And then you

1 could put out a security bond.

2 Well, for some people that worked. For some people  
3 the cost of the security bond was pretty atrocious. So  
4 then we said, well, what if we just partially levelized  
5 it? You know, well, we'll take a little bit of a risk  
6 right. You know, we'll take a little bit of a risk. You  
7 know, we'll take a little bit of risk, but we'd really  
8 like to get you -- this really comes down to does  
9 somebody want to help them get built, or do you want to  
10 put up a roadblock?

11 So my point is in the Titan -- in the Titan contract  
12 clearly somebody did a partial levelization. No security  
13 requirement. I think that was a reasonable thing to do.  
14 If you're concerned about fully levelized, I would say do  
15 something like that that needed Titan.

16 You really kind of started with a number and  
17 inflated it 2 and a half percent a year and had present  
18 value equal to the present value of the levelized price.  
19 And, you know, you could do something like that if you  
20 are concerned about this risk.

21 Q. I wanted to ask you a little bit about this concept  
22 of rate payer neutrality with respect to -- with respect  
23 to PURPA. And the utilities' role in ensuring rate payer  
24 neutrality.

25 In your professional judgment based on your years of

1 experience both inside working for a utility and as a  
2 consultant, are utilities typically neutral on PURPA  
3 issues, for example, things like avoided cost rates?

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

5 Q. Okay. Let me rephrase it. You've heard Mr. Brogan  
6 and I think Mr. Green repeated it on the stand yesterday  
7 say, well, we have no skin in this game. It's just a  
8 pass through to our rate payers and, therefore, the  
9 implication being that NorthWestern is neutral in this  
10 proceeding.

11 In your judgment are utilities typically neutral in  
12 these kinds of cases?

13 A. Well, they talk that theory, but if you're the CEO  
14 of an investor-owned utility, you like rate base. You  
15 like growth in your capital -- in your book value. And  
16 you don't get that when you buy from a QF. It's a pass  
17 through of the price.

18 If you could build it yourself, hey, you get rate  
19 base. You get, you know, growth in your -- in your  
20 balance sheet. You're a bigger player. Now when you get  
21 to the other clubs with the other CEOs, well, how big is  
22 your organization?

23 So there is definitely a bend towards wanting to  
24 own. Now they will claim, well, we don't really care.  
25 It's the same to the rate payer. They do care. Some of

1       them care more than others.

2       Q.     With respect to rate payer risk posed by the Oak  
3       Tree project in terms of rate impact, do you have a sense  
4       of what kind of a risk is posed by the Commission's  
5       decision in this case?

6       A.     Sure.  I mean, when we talk about the fact what if  
7       the Commission comes up with a price, what if they came  
8       up with \$70 a megawatt hour because it's the middle of  
9       the range and it turns out after the fact you could look  
10      it up, it was 50?  You imposed a huge risk.  Well, what  
11      if it turned out it was 90?  Well, you imposed a huge  
12      benefit.

13            But this isn't limited to QFs.  Let's suppose that  
14      this Commission approves the Big Stone expenditure.  Now  
15      that Big Stone expenditure will clean up for haze,  
16      mercury -- I can't remember what all else -- particulate  
17      matter it will clean up.  It won't clean up for carbon.

18            Well, you can say, well, I'm not going to worry  
19      about carbon.  Well, then just suppose five years later  
20      they tell you you either, you know, collect that carbon  
21      and put it in the ground or you shut down?

22            Whoa.  You made a big mistake.  Well, it's a risk.  
23      I mean, you take -- this is a business.  You make  
24      long-term commitment decisions.  QFs build your own  
25      whatever.  You make those commitment decisions, and you



1 have to take a risk. It's a world of decision-making and  
2 of risk. And it's no different for a QF than it is for  
3 any utility owned investment.

4 Q. Okay. I wanted to ask you about the value of RECs.  
5 You used a 7 and a half dollar per megawatt hour figure.  
6 What was that based on?

7 A. Well, that was based on an analysis that  
8 NorthWestern had performed, albeit in Montana, not here.  
9 But I believe the analysis would cover both states. And  
10 that was not a price that was 7 and a half dollars in the  
11 first year. Well, I'll just sell it for a year at 7 and  
12 a half and the next year I'll sell it 7 and a half, and  
13 in the year 2020 I'll sell it 7 and a half.

14 They had a assumption that these aren't worth very  
15 much in the first part of this. They're worth very  
16 little. But as time goes on over the 20 years in this  
17 world where everybody wants to move towards more green,  
18 get rid of, you know, burning up, you know, coal and gas,  
19 they're going to get more valuable. They're going to get  
20 more valuable.

21 And NorthWestern started with a low number and went  
22 up to a certain number. This was all in the resource  
23 plan. And then they levelized it at 7 and a half. So I  
24 don't think we can compare the 7 and a half that I'm  
25 proposing with the \$1 to \$3 Mr. Rounds was talking about,

1 which is kind of what's being traded if somebody needs  
2 something this year.

3 MR. UDA: Thank you, Mr. Lauckhart. No further  
4 questions.

5 MR. SMITH: NorthWestern.

6 CROSS-EXAMINATION

7 BY MR. BROGAN:

8 Q. Mr. Lauckhart, I think I have just a couple of  
9 questions. You've made several statements with respect  
10 to the Titan technology and the Oak Tree technology.

11 Could you tell me what type of wind turbines are  
12 being used at Titan?

13 A. I don't know that specifically. You know, I -- I  
14 think the Makens are here, could probably answer that  
15 question. What I do know is that they're -- it's my  
16 understanding their turbines are taller, they're the new  
17 technology that has -- taller as compared to the Titan.

18 Q. What is your understanding of the turbines that  
19 Oak Tree intends to use? Can you tell me those?

20 A. You know, I only have the vaguest of knowledge. And  
21 part of this issue is -- you know, they had turbines they  
22 were ready to go with the last spring. They were ready  
23 to go.

24 Well, when you don't go, then you have to figure out  
25 when is my next go point and figure out what's the best

1 thing at that time. I don't know if they even know for  
2 sure at the moment. I think they have a good idea what  
3 it's going to cost, where they're going to go to get it.

4 But until you have a power purchase agreement in  
5 hand it makes it a little difficult to get your best deal  
6 from your best manufacturer.

7 Q. In your testimony just a few moments ago I believe  
8 you stated -- and I may -- if I misquote, please --  
9 especially if I don't have the right idea, please correct  
10 me, that nobody believes you can purchase capacity and  
11 energy levelized for 20 years for 37.99. Is that  
12 correct?

13 A. Well, I -- that's not correct because, of course,  
14 NorthWestern believes that. I don't know if they believe  
15 that, but they put the number in this proceeding.

16 Q. Do you understand that the 37.99 does not include  
17 capacity; it is for energy only?

18 A. Okay. I should -- I -- that's probably true. I  
19 should have said 37.99 for the energy component.

20 MR. BROGAN: No further questions.

21 MR. SMITH: Staff.

22 MS. CREMER: Thank you. I have a housekeeping  
23 matter to take care of first. Staff Exhibits 3, 4, 5,  
24 and 6 that I offered, were they ever admitted?

25 MR. SMITH: They were not. Is there now an

1 objection?

2 MR. UDA: No.

3 MR. SMITH: They're admitted.

4 MS. CREMER: All right. Thank you.

5 MR. SMITH: Thanks for remembering that.

6 CROSS-EXAMINATION

7 BY MS. CREMER:

8 Q. Good morning, Mr. Lauckhart.

9 A. Good morning.

10 Q. Can you explain why NorthWestern's use of an average  
11 capacity factor of approximately 9 megawatt across every  
12 hour lowers NorthWestern's calculated avoided cost?

13 A. No. I haven't -- I haven't actually done that --  
14 the numbers on the wind plant.

15 Q. Are you aware of what the typical load shape of wind  
16 is in this region, that is, you know, that the wind blows  
17 more or less during times of peak load?

18 A. I'm generally aware, and I've looked at the met  
19 tower data provided by Oak Tree.

20 Q. Why then do you predict a capacity factor of  
21 20 percent during peak times?

22 A. Well, first of all, it wasn't my prediction. I --  
23 February of 2011 I was using what the MRO thought it  
24 should be calculated at. I didn't know the methodology  
25 that MRO used, but that's what they said at the time.

1 That's why I used 20 percent at that time.

2 Q. Are you aware of the price NorthWestern Energy paid  
3 for capacity over the last 10 years?

4 A. I'm pretty familiar with that. We researched that  
5 in great detail last January, yes.

6 Q. Can you give me that number or those figures?

7 A. Well, so if you recall, what we knew in January of  
8 last year is that they went out looking for capacity, and  
9 they had asked -- they said they couldn't get it from the  
10 other parties because the transmission limitations and/or  
11 the fact that the other parties needed their own  
12 capacity, they flat out couldn't get it from anybody  
13 else.

14 But they had asked Basin if they could get some.  
15 And as of February 25 Basin had said maybe, maybe not.  
16 So then we know that the train that followed on after  
17 that which really occurred in the end of the summer of  
18 2011, there was I think a two-year contract, maybe three  
19 year, I can't remember -- you know, it's that  
20 confidential contract that had some megawatts and some  
21 prices, but it was a two-year contract.

22 It wasn't a contract that said we'll sell you this  
23 for 20 years at X price inflated at 2 and a half percent  
24 a year.

25 Q. And while that's probably all well and good, my

1 question was are you aware of what they paid over the  
2 last 10 years?

3 A. I'm not aware of all the stuff they did prior to  
4 2009.

5 Q. Okay. Did Otter Tail Power consider replacing  
6 Big Stone with market purchases?

7 A. Are you talking about their -- the consultant that  
8 Otter Tail retained?

9 Q. Yes.

10 A. They didn't. That was the point that I was making  
11 is that they should have. A reasonable study would have.  
12 It's not clear why they didn't.

13 Q. Does it make sense to assume Big Stone or its  
14 alternatives will have a useful life of 20 years?

15 A. Very good question. If you spend all of that money  
16 on Big Stone, will there be a carbon restriction put on  
17 it next? If the answer is yes, an extreme carbon  
18 restriction, that life may be five years.

19 So really on these older plants how long they're  
20 going to live is really speculative because a lot of them  
21 are getting shut down for environmental rules. And those  
22 environmental rules come about sometime in the life of  
23 the plant.

24 Q. And what if there are no environmental rules?

25 A. Well, what if the Seattle Mariners win the World

1 Series for the next three years?

2 Q. That's not my question. Which is unlikely but --  
3 but that didn't answer my question.

4 A. So we could -- we could decide we're going to make  
5 decisions today, 20-year decisions, based on the  
6 assumption there's not going to be any future  
7 environmental changes rules. We could make that. We  
8 could decide to do that.

9 I would say that's probably sticking your head in  
10 the sand, but, you know, if that's your choice, that's  
11 your choice.

12 Q. Okay. So then what would your answer be, if that's  
13 the choice?

14 A. What do you mean?

15 Q. Well, you still haven't answered my question.

16 A. You're talking about whether the plant would -- what  
17 the life would be of the plant?

18 Q. Right. If there are no environmental rules.

19 A. Okay. So then if it's not shut down by  
20 environmental purposes, the next thing that happens is  
21 like technology moved so far that, well, this plant  
22 doesn't have to be changed because of environmental  
23 rules, it may have to be changed because new technology  
24 is now available that we didn't even know about. Right?

25 Maybe we can get solar on everybody's roof that's so

1 efficient why would you keep running this coal plant?

2 Q. So I'll try it this way. Historically speaking, do  
3 plants such as Big Stone have a useful life of more than  
4 20 years?

5 A. There was GADS data that they're sort of trying to  
6 keep track of some of that stuff. And actually you can  
7 look at every kind of vintage of the design and all of  
8 these sizes and all of these things, and you can get how  
9 long they've lived historically. You can get that  
10 information. And it varies. Plants vary. You can get  
11 averages.

12 So I don't really know what the GADS data for  
13 similar type plants is. I don't know. But I would say  
14 this: The beginning point of Big Stone wouldn't be 2016.  
15 The beginning point under GADS data would be the day it  
16 went on-line.

17 Q. Okay. I give up.

18 MS. CREMER: I'm done.

19 MR. SMITH: Are you done?

20 MS. CREMER: I am.

21 MR. SMITH: Commissioner questions of  
22 Mr. Lauckhart.

23 Chairman Nelson.

24 CHAIRMAN NELSON: Two questions. You've been  
25 pretty critical of Mr. Rounds using the 204 megawatt



1 number for generation capacity, and yet you chose to do  
2 that when you did your revisions. Why?

3 THE WITNESS: Well, first of all, I had a very  
4 limited amount of time to do my revisions. I got this at  
5 6 o'clock at night, and I turned it in at 8 o'clock the  
6 next morning. So I couldn't do all the changes I would  
7 have liked to have done.

8 So and I was struggling just to figure out how  
9 do I change that 204 to 52 in the year 2016 in his  
10 spreadsheet. So, you know, I figured if I'm going to  
11 52 in 2016, the fact that I've used 204 for five years  
12 isn't really going to be material, I didn't think.

13 CHAIRMAN NELSON: Okay. Second question. And I  
14 fully understand your position on the 20 percent capacity  
15 factor. Let's set that aside for a moment.

16 I want to explore what Mr. Rounds told us this  
17 morning as to why he chose 12.9 percent versus 15.15.  
18 And his answer was 15.5 wasn't available in February of  
19 2011.

20 Would you agree that that is a legitimate reason  
21 to use the 12.9 instead of 15.5?

22 THE WITNESS: No.

23 CHAIRMAN NELSON: Why?

24 THE WITNESS: Well, first of all, what was  
25 available in 2011 when they came up with the 12.9 percent

1 was information on 129 plants. And if you're a market  
2 participant, you have the right and we ought to be able  
3 to get that somehow to this group to go in there and  
4 figure out where are those plants located?

5 And while they didn't publish it in a document  
6 in 2011, we can certainly go back to 2011 and say, well,  
7 if we wanted to know it in February of 2011, couldn't we  
8 find out where those are located?

9 And maybe one of them's Titan. But if none of  
10 them was Titan, well, if 69 of them are located over here  
11 in the area where these guys are, why wouldn't you use  
12 the average of those 69 instead of all the 129?

13 CHAIRMAN NELSON: Well, none of that's in the  
14 record so I can't deal with any of that. So what  
15 argument could you make that you should use 15.5 if that  
16 wasn't in existence in February of 2011?

17 THE WITNESS: You know, I'm saying if you need  
18 to know what was on February 25, 2011, and I think that's  
19 a legitimate point, we need to know that, we used  
20 20 percent because we have information that MRO said  
21 20 percent and NorthWestern did Titan at 20 percent at  
22 that time frame.

23 CHAIRMAN NELSON: Thank you.

24 MR. SMITH: Other Commissioner questions?

25 Commissioner Hanson. I think I saw you nodding

1 your head. Pardon me.

2 COMMISSIONER HANSON: Thank you, Mr. Smith. I  
3 was jotting the profound statements that were being made  
4 by the witness. And the excellent questions that were  
5 being asked by the Chair.

6 You spoke a little bit, Mr. Lauckhart, on  
7 effective -- recognizing wholesale and retail. And can  
8 you touch on the nuances of that just a little bit more  
9 for us?

10 THE WITNESS: Yeah. Because I thought the  
11 concept under the hybrid methodology was, if we add the  
12 wind plant, well, some of the times we're going to have  
13 to back down coal because we don't need -- we've got  
14 enough base load coal to cover our needs.

15 And I'm saying, well, how do you figure out what  
16 your needs are? Is it just a retail load? Because you  
17 also clearly historically make significant wholesale  
18 sales. So why wouldn't we just include those in there to  
19 figure out if we're going to have to back down a coal  
20 plant when we add Oak Tree?

21 COMMISSIONER HANSON: Thank you.

22 Thank you, Mr. Smith.

23 MR. SMITH: Greg, did you have questions?

24 MR. RISLOV: Yes, I did.

25 There's been a lot of discussion related to

1 NorthWestern's basis for determining its load profile  
2 over the next 20 years. And the argument centers around  
3 averages versus actuals.

4 What was your vision of the actuals that  
5 should be used instead of the averages that NorthWestern  
6 used?

7 THE WITNESS: So in my November 21 testimony I  
8 just took on faith that NorthWestern had done it right  
9 before. I didn't have the data that I could do it. So I  
10 just used their hybrid methodology, but I put in my gas  
11 prices. And so it kind of had their numbers in there.

12 But in this new stuff -- so those, by the way,  
13 those numbers are some of my 10. Right? Because all of  
14 those gas prices I put in November 21, they were using  
15 their hybrid methodology.

16 But the new ones we talked about here most  
17 recently with Mr. Rounds is, well, what did I use there?  
18 Well, I kind of used his load shape, as I understand it,  
19 I think the way I did it, but the first thing I did is  
20 kind of backed it down so instead of getting his  
21 7 percent higher, I got back down to the 1660.

22 But then I did a second thing. I added the  
23 wholesale sales in there. And when I added the wholesale  
24 sales in there I just didn't add it flat because, you  
25 know, I think it's pretty clear that they don't do it

1 heavy load hours. They do it more in the lighter load  
2 hours. So I spread it across more of the lighter load  
3 hours.

4 That was the best information I had. Whether  
5 that's the right shape, I don't know. I'm relying on  
6 Mr. Rounds, and it's a reasonable shape.

7 MR. SMITH: Is that it? Does Staff have any  
8 follow-on examination related to Commissioner  
9 questions?

10 MS. CREMER: We do not. Thank you.

11 MR. SMITH: NorthWestern?

12 MR. BROGAN: NorthWestern does not.

13 MR. SMITH: Mr. Uda.

14 MR. UDA: I just have a couple of redirect  
15 questions.

16 MR. SMITH: Please proceed.

17 REDIRECT EXAMINATION

18 BY MR. UDA:

19 Q. I think Mr. Brogan accurately corrected you in  
20 saying that nobody believes that you can get energy  
21 capacity at 37.99 for 20 years. But would you say that  
22 the figure of 37.99 just for the energy portion of  
23 NorthWestern's avoided cost calculation, nonetheless, is  
24 an outlier?

25 A. Yes. I would agree with that.

1 Q. Do you think it's a reasonable market forecast?

2 A. Well, what's reasonable in the market forecast is in  
3 the eyes of the beholder. I think most people would say  
4 if it's in a range of what might be reasonable, it's on  
5 the extreme low end of the range.

6 Q. Would you base policy decisions on the number that  
7 was an extreme low end of the range?

8 A. No. I think most people would say that wouldn't be  
9 the best way to do it.

10 Q. Now Staff asked you this question several times, and  
11 I'm not sure that I understood your answer. Was your  
12 testimony in response to Staff's question about the  
13 reasonableness of assuming no environmental restrictions  
14 and other changes, I guess, in the law, was it your  
15 testimony that that was an unreasonable assumption?

16 A. I guess maybe put that in the same range. Let's  
17 have a range of what might happen with environmental  
18 things in the future. An assumption that nothing would  
19 happen in the next 20 years? Maybe in the range, but it  
20 would be the extreme low end of the range.

21 MR. UDA: No further questions.

22 MR. SMITH: I think that concludes your  
23 testimony. Thank you, Mr. Lauckhart.

24 THE WITNESS: Thank you.

25 MR. SMITH: Any further witnesses, Mr. Uda?

1 MR. UDA: No, Mr. Smith.

2 MR. SMITH: I think that concludes the  
3 evidentiary portion of the hearing then. Should we take  
4 a few minutes now then and discuss where we go from here  
5 in terms of posthearing briefing, et cetera?

6 And maybe I think at this point since we're done  
7 with the evidentiary portion, I'm going to turn this back  
8 over to the Chair, unless you want me to do it.

9 CHAIRMAN NELSON: Go ahead.

10 MR. SMITH: Yeah. I mean, let me ask the  
11 attorneys here what you think is appropriate in terms of  
12 whether or not posthearing briefing is in order and  
13 useful?

14 I know this -- and the Commissioners, if they  
15 want to, I guess they have the perfect right to vote  
16 right now. I just don't know. I guess myself, I -- I  
17 wouldn't mind seeing the transcript and knowing what's in  
18 there. But I'll defer to the Chairman on that.

19 CHAIRMAN NELSON: And only speaking for myself,  
20 there's some additional work that I'd like to do on this  
21 before I vote. But do I think I need to see posthearing  
22 briefs to do that? The answer would be no.

23 MR. SMITH: Okay.

24 CHAIRMAN NELSON: But --

25 COMMISSIONER HANSON: I probably do not.

1       However, I never deny anyone the opportunity for one last  
2       shot. I'm not opposed to it by any means. I think I  
3       have all of the answers -- well, I know I have all of the  
4       answers that I want. It's just that sometimes summations  
5       make it nice and neat for me.

6               MR. SMITH: Okay. Commissioner Fiegen, any  
7       thoughts?

8               COMMISSIONER FIEGEN: I'm fine with whatever the  
9       groups want to do. I don't need --

10              MR. SMITH: Okay. The only issue, I guess, for  
11       me that kind of hovers out there a little bit is kind of  
12       the one you raised, Mr. Uda, about the PURPA regulations,  
13       et cetera, and the extent to which the flexible if you  
14       want to call it that or analyzed type values are  
15       compatible with the PURPA.

16              That's something that perhaps I wouldn't mind  
17       some analysis from both sides as to what the limits are  
18       that we have to live within.

19              I know there's two options, right, under PURPA,  
20       two basic options, as I understand it. And I'm just  
21       going from memory here. And that is as of the date of  
22       delivery or a fixed price over a period of time. And I  
23       guess I just wonder what our flexibility is within that  
24       regime would be something that I'd be interested in  
25       hearing your thoughts on.



1           But I would also -- I'll defer to obviously the  
2 Commissioners on that. But to me it's a little bit of an  
3 issue hovering out there that we haven't heard anything  
4 on really.

5           Any thoughts, Chairman, or any attorneys?

6           CHAIRMAN NELSON: I've got that particular  
7 issue, I think, resolved in my mind, but I'd certainly  
8 defer if the attorneys want to brief on that. I'd  
9 certainly be willing to look at it.

10          MR. UDA: The only reason I'm hesitant and  
11 obviously I don't want to -- there's been a lot of paper  
12 in this proceeding, and I know the holidays are coming  
13 up. And I'd prefer you guys to be, I don't know, reading  
14 Dickens rather than be reading briefs.

15          The only concern I have is because we really  
16 didn't get a chance to do closing arguments and it helps  
17 me, I think, synthesize my own thoughts about the  
18 evidence in the case and disciplines my own mind.

19          Because, I mean, I think there's some issues  
20 here that the parties are really not that far apart on.  
21 And it might be something that can be accurately or  
22 adequately summarized in a brief where we say -- I mean,  
23 I'm just throwing this out.

24          I think, you know, for example, I don't think  
25 Mr. Lauckhart and Mr. Rounds are that far apart, at least

1 on the energy price forecast. That might be something we  
2 can agree on as a starting point and maybe come up with  
3 an alternative avoided cost number based on that kind of  
4 agreement. And it might be something that would be  
5 useful for the Commission to see.

6 That's my concern.

7 MR. SMITH: Does anybody have any suggestions?

8 You know, I would assume if the Commissioners at  
9 least want to take another look at the analyses, et  
10 cetera, we've all been fairly crammed timewise here. You  
11 know, we have Commission meetings coming up when?

12 One on December 18. That's pretty much of a  
13 cram. And then the next one I think is -- I think we're  
14 not having another meeting then for two weeks after that  
15 to avoid the holiday problem. So we'd be talking into  
16 January. I don't think there's a meeting scheduled.

17 MS. CREMER: I think there's a meeting January  
18 3. Oh, it's just I an ad hoc. Okay.

19 CHAIRMAN NELSON: It's only if we need one.

20 MR. SMITH: That's a calendar entry only. The  
21 assumption is that we will not be having a meeting that  
22 day, unless it's urgent for some reason.

23 MS. CREMER: All right. So then it would be two  
24 weeks after, that it would be Tuesday. What, the 16th?  
25 Is that the next one then, January 16th?

1           CHAIRMAN NELSON: 17th.

2           MR. SMITH: 17th. I think that's it. And I  
3 think we've been operating under the assumption that  
4 that's the next meeting after December 18. And should we  
5 think along that time frame in terms -- I think it's  
6 January 15, yeah. Yeah. It is. Yep. Because we have  
7 already I know put some items on for that agenda, are  
8 planning for that agenda.

9           But would that be a suitable date for the  
10 Commission to bring this forward for decision?

11          MR. UDA: Well, one thing is --

12          MR. SMITH: Then we work around that in terms of  
13 whatever else you want to do?

14          MR. UDA: As always, I work at the pleasure of  
15 my clients. So one of the things I might do with the  
16 Commission's indulgence is just briefly confer with them  
17 about whether that works or not or whether they're in --  
18 given that time frame they're willing to forego doing  
19 briefs or not.

20          CHAIRMAN NELSON: I think that would be  
21 appropriate if you'd want to do it. But I'd also like to  
22 hear from both Staff and Mr. Brogan whether you would  
23 like to do briefs.

24          MR. BROGAN: Karen, to you want to go ahead?

25          MS. CREMER: Go ahead. I know where I stand,

1 but go ahead.

2 I can go if you want me to.

3 MR. BROGAN: Please, do.

4 MS. CREMER: I, of course, am a very late-comer  
5 to this game, but I don't see a real -- I don't see a  
6 legal need for briefing.

7 But if we decide to brief it, I would prefer  
8 that there be a specific question put out there that we  
9 all address. Not a shotgun, you know, trying to  
10 recapture two years worth of whatever here, testimony and  
11 argument.

12 So if you decide to brief, and that's fine, but  
13 I really would prefer a very narrow question of what  
14 exactly the parties or the Commissioners believe needs  
15 to be answered from a legal basis that isn't in the  
16 record.

17 MR. RISLOV: Commission Chair, if I could.

18 CHAIRMAN NELSON: Certainly.

19 MR. RISLOV: I don't know about legal questions  
20 that need to be answered, but there has been some change  
21 in the past week that is reflected only at the hearing.

22 I would like to see the parties put together at  
23 least some sort of exhibit that synthesizes, you know,  
24 where they came out after this testimony and this hearing  
25 as far as their avoided cost numbers and the elements of

1 that avoided cost.

2 CHAIRMAN NELSON: Well, I believe -- I mean,  
3 Staff's already done that with their Exhibit 6.

4 MR. RISLOV: If there have been any subsequent  
5 changes possibly by the parties. And, you know, if  
6 that's fine, that's fine. But after this testimony, you  
7 know, if there's -- maybe it could be one more bite at  
8 the apple too. I could describe it that way possibly.  
9 But that's just a thought.

10 CHAIRMAN NELSON: Mr. Brogan.

11 MR. BROGAN: At the risk of getting myself in  
12 trouble, first to answer the specific question would I  
13 like to write a brief during the upcoming holidays?  
14 Probably not. But --

15 CHAIRMAN NELSON: That's what you've got  
16 Mr. Olson for.

17 MR. BROGAN: I think there are a couple of very  
18 narrow legal issues that NorthWestern at least has not  
19 weighed in on yet that were presented in testimony in  
20 responsive testimony that I think probably needs to be  
21 addressed in one manner or another.

22 The reason I say that is it's -- I'm trying to  
23 get used to what appears to be the Commission practice of  
24 having oral argument with respect to these things. And  
25 if the Commission's going to have oral argument when it

1 brings this forward, it would seem to me that briefs  
2 might not be necessary.

3 Both Mr. Uda and I, and I assume Ms. Cremer, can  
4 be eloquent with respect to our legal arguments  
5 verbally.

6 CHAIRMAN NELSON: And I think that would be fine  
7 with us. I'm looking at my fellow Commissioners. Oral  
8 arguments as opposed to briefs?

9 COMMISSIONER HANSON: I don't need oral  
10 arguments. Briefs are far more -- briefs are far more  
11 advantageous to me at this juncture than having oral  
12 arguments.

13 CHAIRMAN NELSON: It looks like that may be the  
14 preference then.

15 COMMISSIONER HANSON: And I think summation --  
16 you know, I don't need to have the entire -- I think  
17 everyone's expressed that, and certainly we don't -- if  
18 someone wants to put up a simple matrix of where they are  
19 and where we all are -- excuse me. Where all three  
20 parties are at this juncture, that's fine with me. I  
21 don't need anything more than that.

22 COMMISSIONER FIEGEN: One page?

23 CHAIRMAN NELSON: I think what I'm hearing is  
24 that briefs will be in order, but we do not need a  
25 rehashing of this entire case. It needs to focus -- and

1 I don't know that I want to enumerate the specific issues  
2 that need to be addressed, other than the question that  
3 Mr. Smith threw out. I would like to hear some  
4 additional on that. I think I've got it resolved. But  
5 for his benefit I'd like to see that addressed.

6 And then whatever specific legal issues you  
7 think have not been adequately addressed. But we do not  
8 need a rehashing of the entire case.

9 COMMISSIONER FIEGEN: And Greg's comments.

10 CHAIRMAN NELSON: And Greg's. Yeah. I'm good  
11 with that.

12 MR. UDA: I hate to interject. I'm just trying  
13 to make sure I understand is there going to be a written  
14 order that outlines exactly what Mr. Rislov wants from  
15 us?

16 MR. SMITH: We can certainly put something out,  
17 yes. And that might not be a bad idea so you guys have  
18 a --

19 MR. UDA: Well, I'm just trying to make sure  
20 that we're complying with what the Commission wants us to  
21 do.

22 MR. SMITH: Yeah. We can do that. And that  
23 would give us a little chance to discuss it internally  
24 and figure out what we really believe we need.

25 CHAIRMAN NELSON: So far as timing.

1 MS. CREMER: How about the parties and Mr. Smith  
2 figure that out because we're going to have to get a  
3 transcript and, as we all know, it's over the holidays.  
4 But if we're trying to make that January 15 date, you  
5 know, we're going to have to --

6 You know, again, is it one round? Do we get to  
7 all respond? Does Oak Tree get the last bite? It all  
8 becomes very complicated. So I think we should do it  
9 amongst the parties with Mr. Smith.

10 CHAIRMAN NELSON: That works for me. Anything  
11 else for the good of the order?

12 And as you're having that discussion, I mean, it  
13 may end up that we can't hit January 15. And if it is,  
14 so be it. Obviously, I'd like to see this resolved at  
15 least at this level.

16 Anything else for the good of the order?

17 If not, we will stand adjourned.

18 (The hearing is concluded at 11:45 a.m.)

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1 STATE OF SOUTH DAKOTA )

2 :SS CERTIFICATE

3 COUNTY OF SULLY )

4

5 I, CHERI MCCOMSEY WITTLER, a Registered  
6 Professional Reporter, Certified Realtime Reporter and  
7 Notary Public in and for the State of South Dakota:

8 DO HEREBY CERTIFY that as the duly-appointed  
9 shorthand reporter, I took in shorthand the proceedings  
10 had in the above-entitled matter on the 5th and 6th days  
11 of December, 2012, and that the attached is a true and  
12 correct transcription of the proceedings so taken.

13 Dated at Onida, South Dakota this 20th day of  
14 December, 2012.

15

16

17

18 Cheri McComsey Wittler,  
19 Notary Public and  
20 Registered Professional Reporter  
21 Certified Realtime Reporter

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