1	THE PUBLIC UTILITIES COMMISSION
2	OF THE STATE OF SOUTH DAKOTA
3	
4	IN THE MATTER OF APPLICATION OF EL11-019 NORTHERN STATES POWER COMPANY
5	D/B/A XCEL ENERGY FOR AUTHORITY TO INCREASE ITS ELECTRIC RATES
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8	Transcript of Proceedings June 13 and 14, 2012
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10	BEFORE THE PUBLIC UTILITIES COMMISSION, CHRIS NELSON, CHAIRMAN
11	CHRIS NELSON, CHARMAN KRISTIE FIEGEN, VICE CHAIRMAN GARY HANSON, COMMISSIONER
12	
13	COMMISSION STAFF John Smith, Commission Counsel
14	Karen Cremer, Staff Counsel Ryan Soye, Staff Counsel
15	Greg Rislov, Staff Brian Rounds, Staff
16	Jon Thurber, Staff
17	APPEARANCES Kari Valley and Rick Johnson, Xcel Energy
18	Nati varie, and Nick Common, Noci Energy
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23	Reported By Cheri McComsey Wittler, RPR, CRR
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1 CHAIRMAN NELSON: Welcome, everyone. We will 2 begin the hearing in Docket EL11-019 in the matter of 3 the application of Northern States Power company d/b/aXcel Energy for the authority to increase its electric 5 rates. 6 The time is approximately 1 p.m. The date is June 13, 2012. And the location of the hearing is in 8 Room 413 of the State Capitol Building, Pierre, 9 South Dakota. 10 I'm Chris Nelson, Chairman of the Commission. 11 Commissioners Kristie Fiegen and Gary Hanson are also 12 present. 13 I'm presiding over this hearing. This hearing 14 was noticed pursuant to the Commission's Order for and Notice of Hearing issued on May 24, 2012. As you will 15 recall, on May 24, 2012, the Commission also issued an 16 Order Granting a Joint Motion For Approval of the 17 18 Settlement Stipulation that resolved most of the issues 19 in this case. 20 The issues not covered by that Settlement 21 Stipulation and, therefore, remaining to be addressed in 22 this hearing are, number one, to what extent, if any,

23 should the capital costs and operating expenses 24 associated with the Nobles Wind Project be included in 25 Xcel Energy's revenue requirement and recovered in rates;

TRANSCRIPT OF PROCEEDINGS, held in the above-entitled matter, at the South Dakota State Capitol Building, Room 413, 500 East Capitol Avenue, Pierre, South Dakota, on the 13th and 14th days of June,

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7	XCEL WITNESSES	DIRECT	CROSS	REDI	RECT	RECROSS	
8	Laura McCarten	14 30	18	 62			
9	James Coyne Jim Alders	122	127	195		197	
10	STAFF WITNESSES						
11	Basil Copeland, Jr. Kavita Maini	68 199	90 217	 247		116	
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13	REBUTTAL WITNESSES		CROSS	KEDI	RECT	RECRUSS	
14	James Coyne James Alders	118 256					
15	XCEL EXHIBIT NOS.			М	0	R	
16	1 - McCarten Direct 2 - McCarten Rebuttal			2 2	6 6	7 7	
17	3 - Alders Direct			2	6	7	
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24	4 - Maini Rebuttal Confi 5 - Copeland Direct	dential		2	6 6	7 7	
	6 - Copeland Rebuttal			2	6	7	

7 - Fortnightly 2011 ROE Survey

cost of debt, capital structure, and resulting overall 3 rate of return to produce just and reasonable rates; and, number three, what additional adjustments to rate 5 elements are necessary as a result of the Commission's decisions on issues 1 and 2. 6

number two, what is the appropriate return on equity,

Pursuant to SDCL 49-34A-8.4, Xcel has the burden of proof to establish that the underlying cost of the rates, charges, or automatic adjustment charges for which it seeks approval are prudent, efficient, and economical and are reasonable and necessary to provide service to its customers in this state.

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

Finally, just a couple of reminders for everybody participating. First I want to remind everyone that the hearing is being transcribed by our court reporter, Cheri Wittler, and broadcast over the internet. So I'd ask everyone to make sure that they have their

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7 1 1 MS. CREMER: That's correct. microphones on and close enough to their mouths when 2 2 testifying or asking questions. Also speak clearly and MR. SMITH: Okay. The referenced exhibits then at a reasonable pace, which I've already violated, to 3 are admitted. 4 4 make sure we get an accurate transcript. With that, I'm going to bring up one more thing 5 Also I would remind counsel of the need to be 5 in the nature of a question here, I guess. Opening 6 mindful of the confidential nature of some of the 6 statements. Do either of counsel wish to make opening 7 7 testimony and exhibits that will be presented at the statements? 8 8 hearings and to call our attention to those instances so MS. CREMER: Yes. Ryan Soye on behalf of Staff 9 9 that we can make the necessary arrangements to go into will make an opening statement. 10 closed session when necessary. 10 MR. SMITH: Okay. And because you're second in 11 11 That said, I will now turn it over to Mr. Smith order, would you prefer to do that now, after Xcel, or 12 to conduct the hearing. 12 would you prefer to do it prior to your testimony 13 13 MR. SMITH: Thank you, Mr. Chairman. Welcome, commencement? 14 14 everyone. MR. SOYE: We'll just go ahead and do it now 15 15 First we'll take the appearances of the parties. after Xcel makes their opening statement. 16 16 Ms. Valley we'll start as the Applicant with Xcel, MR. SMITH: Xcel, would you care to make an 17 please. 17 opening statement? 18 18 MS. VALLEY: Thank you. Good afternoon. MS. VALLEY: Thank you, Mr. Smith. We just have 19 19 a brief comment. We wanted to thank the Commissioners Kari Valley on behalf of Xcel Energy. 20 20 and Staff for the time they've taken in reviewing our MR. JOHNSON: Good afternoon. Rick Johnson, 21 21 also appearing on behalf of Xcel Energy. case and bringing it forward. 22 MR. SMITH: And Staff. Ms. Cremer. 22 We're looking forward to the hearing process 23 MS. CREMER: Thank you. Karen Cremer on behalf 23 today to provide the Commission the evidence that it of Staff. 24 24 needs to support its determination of just and reasonable 25 25 rates that balance the interest of customers and MR. SOYE: And Ryan Soye on behalf of Staff. 8 1 MR. SMITH: Okay. With that, I'm going to just 1 investors. 2 ask whether we have any preliminary matters to attend to. We don't have any formal opening statements from 3 And I just -- I don't know, obviously, because I'm not the attorneys today, but we note that each of our 4 part of the parties here. But such as stipulations as to 4 witnesses will be providing an opening summary of their 5 5 admission of exhibits. testimony. 6 6 Has there been any discussion of that between MR. SMITH: Mr. Soye. 7 the parties? 7 MR. SOYE: Thank you. This is Ryan Soye. I'm 8 MS. CREMER: Yes, Mr. Smith, if I may. The 8 part of Staff. And Staff felt it was important for us to 9 parties have agreed to stipulate to the admission of all 9 make this opening statement to really lay out our 10 10 the exhibits that are found on the exhibit lists of Staff approach especially to Nobles as this is an issue that we 11 and NSP. 11 feel is not addressed by this Commission nearly as often 12 Staff's exhibits consist of 1 through 6, which 12 as the ROE issues may have been addressed so we will make 13 13 is the testimony and exhibits of its two witnesses, a relatively brief opening statement. Hopefully I don't 14 Kavita Maini and Basil Copeland, Junior. I will let NSP 14 run on too long. 15 15 reference its own exhibits after I'm finished. As previously stated today, we're deciding two 16 Therefore, Staff would offer the exhibits I have 16 issues. The issue of ROE. The Commission is asked to 17 17 referenced and would request they be admitted into establish the appropriate return on equity, cost of debt, 18 evidence. 18 capital structure, and resulting overall rate of return 19 MS. VALLEY: Thank you. And Xcel offers into 19 to produce just and reasonable rates. 20 20 evidence today Xcel Energy Exhibits 1 through 9, Staff beliefs the evidence will establish that 21 representing the prefiled direct, rebuttal, and 21 the rates are just and reasonable, giving due consideration to the criteria set forth in South Dakota 22 surrebuttal testimony of our witnesses, Laura McCarten, 22 23 23 Statute. James Alders, and James Coyne.

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Staff also believes that Xcel has not and cannot

meet its burden to prove that the rates are prudent,

MR. SMITH: Thank you. And both sets are

stipulated to by both parties?

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efficient, economical, and reasonable and necessary to provide service to their South Dakota rate payers.

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Staff will call Mr. Basil Copeland, Junior, who will present testimony with respect to the cost of capital for Xcel and make recommendations as to fair and reasonable rate of return based on the evidence. And Mr. Copeland will also respond to the testimony of Xcel's witnesses Dane, McCarten, and Coyne.

As for the second issue, the Commission is asked to determine, to what extent, if any, should the costs associated with Nobles Wind Farm be included in Xcel's revenue requirements and recovered through its rates. Again, Xcel cites the South Dakota statutes claiming that this investment is prudent, economical, and efficient and also that it is reasonable and necessary to serve its South Dakota customers.

In support of this claim of Xcel, Xcel has provided two stratus modeling runs which have been termed the conservative modeling approach and I believe the second has been termed the second modeling approach and at least that's what we're going to call it.

The evidence shows that Xcel has not met its burden of proof that Nobles is a necessary and cost-effective investment to serve its South Dakota customers.

Staff will call its witness Kavita Maini who will testify Nobles cannot be necessary because it was not necessary to meet any capacity requirements, energy deficiency, and it was not required to meet South Dakota's Renewable Energy Objective, as Xcel had already achieved a renewable resource mix of 10.3 percent at the time the decision to build Nobles was made.

Xcel argues that because they operate a multistate integrated system, the cost associated with policies of any one of the five states in which it operates should be adopted by the system wide to achieve effective and efficient planning. Staff wants to make clear that nowhere in its testimony does it object to the integrated system approach to resource planning. In fact, we agree that this method of planning does provide many benefits.

However, where Staff and Xcel differ is applying this approach to policy requirements. When the traditional notions of need are removed, we believe this planning approach is no longer appropriate.

Aside from the issues of whether or not Nobles is necessary, Xcel claims Nobles does not only satisfy these renewable policies, it is a cost-effective resource addition. However, as our witness has and will testify, Xcel's conservative modelling approach clearly shows that 1 the costs associated with Nobles outweigh the benefits.

Now granted we are referring only to the conservative modeling approach here. However, nearly the entire time this Docket has been under review by Staff and discussed between the parties Xcel presented this as the justification for Nobles Wind Farm. And it was not until April 27 through the testimony -- after discovery had finished, through the testimony of Mr. James Alders that Xcel provided the second modelling approach and advances that Nobles, although it may not be required on terms of traditional notions of need, it is justifiable on the basis of economy energy.

However, the evidence will show that the cost savings, the statements of cost savings advanced by Xcel in its second modeling approach are insufficient to justify the cost recovery under South Dakota Law on the basis of economy energy. Through its prefiled testimony Staff has advanced that to justify resource additions on the basis of economy energy when the traditional elements of need are removed, a thorough analysis and reporting must be presented to the Commission in a timely manner to enable us to properly review those assertions.

This is due to the risk of error and long-term forecasting compounded by the inherent difficulty in forecasting the benefits of wind which this Commission is

If the decision to Nobles was based on notions

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1 very well aware of due to recent dockets presented in 2 other matters.

4 of economy energy, then this is a discretionary 5 investment, and truth be told these discretionary 6 investments are made by companies every day. However, 7 Staff is advancing that when you make this type of 8 decision, it needs to be more thoroughly vetted, 9 supported by reports that clearly justify the cost 10 benefits of the investment.

As the evidence -- as Staff believes the evidence does not justify Nobles' untraditional rate making principles. We have recommended complete disallowance of this investment. However, we have also provided the Commission an alternative nontraditional method of partial disallowance which recognizes the fuel and nonfuel benefits that Nobles can provide Xcel's South Dakota customers.

And we want to be sure that the Commission -- we 20 are clear to the Commission that this is a nontraditional approach. And we don't want to get caught in the -- in a 22 discussion of whether or not looking back to a \$4 per ton carbon cost data, versus a 17, which was used at the time or capping the costs associated with the investment, is appropriate, whether or not we're viewing this in

1 hindsight. 2 We are offering an alternative method so we 3 don't feel we are bound by the traditional norms of 4 viewing information that was available at the time of 5 recouping only the -- or recouping all prudently incurred 6 costs, as this is a nontraditional method we believe that 7 it is appropriate to make certain adjustments that we 8 feel bring it in line with a more reasonable recovery 9 amount on this investment, as the traditional notions of 10 cost recovery or rate making would suggest throwing the 11 entire wind farm out. 12 With that being said, Staff asks the Commission 13 to find Xcel has not met its burden of proof at the end 14 of this hearing and rule in favor of Staff's 15 recommendations.

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16 Thank you.

17 MR. SMITH: Thank you, Mr. Soye.

18 Ms. Valley, are you prepared to proceed with

19 your case in chief?

MS. VALLEY: Thank you, Mr. Smith. Yes, we are.

21 MR. SMITH: Please proceed.

22 MS. VALLEY: Thank you. I would like to call

23 our first witness, Ms. Laura McCarten, to the witness

24 stand.

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LAURA MCCARTEN,

called as a witness, being first duly sworn in the above

3 cause, testified under oath as follows:

DIRECT EXAMINATION

5 BY MS. VALLEY:

6 Q. Ms. McCarten, could you please state your name and

7 business address for the record.

8 A. Laura McCarten. My business address is 414 Nicollet

9 Mall, Minneapolis, Minnesota 55401.

10 Q. And who is your employer?

11 Α. Northern States Power-Minnesota.

12 **Q.** And what is your title?

13 A. I'm regional vice president for state affairs.

14 Q. Were you here when we marked and stipulated the

15 exhibits into the record today?

16 A. Yes.

17 **Q.** Are Xcel Energy Exhibits 1 and 2 copies of your

18 prefiled, direct, and rebuttal testimony in this case?

19 A. Yes.

20 **Q.** Do you adopt Exhibits 1 and 2 as your sworn

21 testimony today?

22 A. Yes.

23 Q. And, Ms. McCarten, would you care to give an opening

24 statement?

25 Yes. Thank you.

1 Good afternoon, Commissioners and everyone. On 2 behalf of the company I would like to thank the Staff and 3 the Commission for their efforts in reviewing and working 4 to understand our rate case filing.

6 we've brought forward a contested hearing to the South Dakota Public Utilities Commission. But we believe R it is appropriate to engage the Commissioners on the 9 issues of return on equity and cost recovery of the 10 Nobles Wind Project because they are of such fundamental 11 importance.

As we all recognize, it's been a long time since

The Commission's decision on these issues has a significant impact for our customers and the company. I believe all parties share the common goal of getting to the right answer.

But you as Commissioners have a unique role as judge, evaluating and weighing the evidence presented to you today or in this hearing and seeking an outcome that achieves proper balance between establishing just and reasonable rates, supporting the company's delivery of safe and reliable service to our customers at an affordable price, and allowing our investors an opportunity to earn a reasonable rate of return.

In this hearing you will hear testimony on the rate of return, equity, capital structure, and cost recovery

for our Nobles project. Our external ROE expert, Mr. Jim Coyne, provides testimony on the proposed ROE and

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3 capital structure in this case and why a reasonable ROE

is significant at any time but particularly so now when

5 the company is facing very large infrastructure

6 investments requirements.

investment needs.

7 To meet our customers' current and future needs we 8 plan to invest approximately \$6 billion in generation, 9 transmission, and distribution over the next several 10 years and ROE has added importance in this time of heavy

12 As I presented in my testimony, even if the 13 Commission adopts the company's proposed ROE our actual 14 return in 2012 will be no more than 8.1 percent, a level 15 that is not comparable to return that investors can earn 16 elsewhere. And I know that this estimate also assumes 17 full recovery of Nobles as well as our assumed 2012 sales 18 projections.

If our actual ROE is not comparable to other investments, this will negatively affect the company's financial health and access to capital, and rate payers ultimately will face higher costs because of the higher costs of capital. We believe this result is not in the interest of our customers nor the company. This very low actual ROE in 2012 is a result of

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- 1 several factors which includes infrastructure levels at a
- 2 level much higher than we've seen in previous periods
- 3 exaggerated by a regular lag in regular framework.
- 4 Furthermore, continued very low sales growth in the first
- 5 part of 2012 means it unlikely we can even achieve the
- 6 8.1 percent ROE in 2012.
- 7 So within this rate case the Commission's decision
- 8 on ROE and other issues is the only significant action
- 9 that can affect our ROE in a reasonable direction. We
- 10 believe the proposed rate of return on equity and capital
- 11 structure are supported by the evidence and reflect the
- 12 proper balance between the interest of customers and the
- 13 company.
- 14 With respect to the Nobles Wind Project, we believe
- 15 the evidence we've presented in this case satisfies the
- 16 standard for recovery of investment costs as prudent,
- 17 efficient, and economical. This evidence and fundamental
- 18 rate making principles justify full recovery of the
- 19 Nobles project because it is a cost competitive resource
- 20 for our South Dakota customers. And company witness
- 21 Mr. Jim Alders provides additional testimony on this
- 22 issue.
- Overall I believe we've justified and supported our
- 24 request, and I look forward to the opportunity to further
- 25 support it during this hearing process. Thank you.
- **1** MR. SMITH: Please proceed.
- **2** MS. VALLEY: Thank you, Mr. Smith.
- **3** Ms. McCarten is available for cross-examination.
- 4 MR. SMITH: Staff.
- **5** MS. CREMER: Thank you. This is Karen Cremer of
- 6 Staff.

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CROSS-EXAMINATION

- 8 BY MS. CREMER:
- **9 Q.** Good afternoon.
- 10 A. Good afternoon.
- **11 Q.** Prior to this rate case filing, what year did NSP
- 12 file a rate case?
- 13 A. If I could just refer to my notes so I make that
- 14 correct, the last rate case we filed was in 2009.
- **15 Q.** And prior to that 2009 filing, what year did NSP
- 16 file a rate case?
- 17 A. I believe it was in 1992.
- **18 Q.** And I would refer you to Xcel Exhibit 2.
- 19 A. Okay. I have that.
- **20 Q.** Okay. Page 2. And that would be lines 3 through 6
- 21 of your rebuttal testimony. And it states "ROE has added
- 22 importance in a time of heavy investment and the
- 23 company's actual earnings from its South Dakota electric
- 24 operations have been far below both reasonable levels and
- 25 authorized levels."

- **1** Do you see that?
- 2 A. Yes
- **3 Q.** Beginning with 1992 through the present, can you
- 4 tell us exactly what years NSP's actual earnings have
- **5** been below its authorized levels and the amounts?
- 6 A. Information I have available would be of the most
- 7 recent years. And I believe it is in my original
- 8 testimony, and I could refer back to that and give you
- 9 the exact numbers for 2011, 2010, 2009, and I think maybe
- 10 I have 2008 as well. So I could secure that information
- 11 from Exhibit 1, I believe.
- **12 Q.** But between '92 and 2010 or 2008 you don't have that
- 13 information?
- 14 A. I don't have that, no.
- **15 Q.** I would refer you then same exhibit on page 5.
- 16 A. Okay.
- 17 Q. Lines 21 through 23. And you state "Although that
- 18 year was complete, we were unable to update our costs to
- 19 fully reflect actual results for 2011, leading to the
- 20 additional 12-month gap between our costs in 2012 and our
- 21 rates based on 2010 levels."
- 22 Do you see that?
- 23 A. Yes.

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- **24 Q.** What prevented NSP from being able to update those
- **25** costs to fully reflect results for 2011?
- 1 A. We did -- Ms. Cremer, we did raise this issue and
 - 2 had a discussion on this issue with Staff. And
 - 3 ultimately there was an understanding or a conclusion
- 4 that it would not -- there were impediments to going
- 5 forward to do that in this rate case, including questions
- 6 on how that would affect the legal notice to customers,
- 7 whether that would have to be changed, considerations of
- $\boldsymbol{8}$ $\,$ additional costs to process the rate case, and then
- 9 finally that it would push the time frame of this rate
- 10 case beyond the June 30 deadline.
 - So those, as I understand it, were the reasons that
- 12 we were not able to proceed to update all of 2011
- 13 actuals.

- **14 Q.** By 2011 actuals do you mean the 2010 test year?
- 15 A. I'm sorry. Perhaps I misunderstood your question,
- 16 your original question. So I -- I was speaking to the
- 17 2011 actuals.
- **18 Q.** When you discussed that with Staff -- and I think,
- 19 like you said, we were about eight and a half months into
- 20 the process when you discussed it with Staff -- were you
- 21 talking about updating 2010 test year, or were you
- 22 talking about updating 2011?
- 23 A. Ms. Cremer, my recollection is we were talking about
- 24 updating 2011.
- 25 Q. Okay. Thank you.

- 1 If NSP didn't agree with Staff's position on any of
- 2 those costs, other than the two that we're here for
- 3 today, those could have been litigated along with ROE and
- 4 Nobles; is that correct?
- 5 A. Ms. Cremer, when you say "any of those costs," could
- 6 you help me understand your question better.
- **7 Q.** Well, part of my concern is NSP on the one hand
- 8 complains about, you know, not being able to update those
- **9** costs, and you were talking about the 2011 costs, which,
- 10 of course, as you pointed out would have been near
- 11 impossible to do, but you had the opportunity or you
- 12 could have -- you know, if you disagreed with what we
- 13 ultimately stipulated to, you could have taken forward
- 14 any of those costs, or you could have come before this
- **15** Commission and asked that 2011 be updated.
- 16 A. Ms. Cremer, that's true. I think that as we were
- 17 working on this case and trying to resolve issues where
- 18 we could, we had the basis of the original filing that we
- 19 had made reflected known and measurables in a manner that
- 20 had been found acceptable by Staff and Commission the
- 21 previous rate case. So we had started on a course that
- 22 we thought was, you know, in keeping with the direction
- 23 that had been set I think in the previous rate case.
- 24 So our original filing included that type of cost.
- 25 When we got to the point after, you know, eight or nine

 - months into the process, we were certainly interested in
- 2 trying to bring the process to a conclusion quickly, and
- 3 we felt in our judgment that coming to the settlement
- 4 that we were able to negotiate with Staff on those items
- 5 was appropriate, and then we'd bring the other very
- 6 significant items to the contested hearing.
- 7 So in the course of working with Staff, I think we
- 8 took a course of action that we felt was reasonable and
- 9 appropriate.
- 10 Q. How many adjustments did NSP make to the 2010 test
- 11 year for changes that occurred after the end of the test
- **12** year?

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- 13 A. Ms. Cremer, I'm just not familiar with that
- 14 information.
- **15 Q.** Subject to check, would you believe it to be 36
- **16** operating income pro forma adjustments and 12 additional
- 17 rate based pro forma adjustments?
- 18 A. I'm sorry. I just can't -- I just can't speak to
- 19 today knowing that exactly.
- **20 Q.** Are you generally familiar with the South Dakota PUC
- 21 rate filing rules?
- 22 A. I'm generally familiar.
- $\textbf{23} \quad \textbf{Q.} \quad \text{Okay. If you're not, I can show you the one I'm}$
- 24 talking about, but I think you will know.
- **25** Do our rules allow the Commission to consider

- 1 adjustments that become effective within 24 months of the
- 2 last month of the test period, which would be December
- 3 2012 in this case, do our rules allow an adjustment to
- 4 become effective? Do you know?
- 5 A. My understanding is they do, that it's permissive up
- 6 to 24 months.
- **7 Q.** Would you agree that it is NSP's responsibility to
- **8** identify cost increases if they lead to earnings erosions
- **9** and to demonstrate that they are known and measurable?
- 10 A. I agree that we should do that. If I may just make
- 11 a point that, again, as I mentioned earlier, when we
- 12 prepared this rate case we tried to do it within the
- 13 construct that had been found acceptable by the
- 14 Commission and Staff in the previous proceeding, which
- 15 allowed 12 months of known and measurables that could be
- 16 tied to specific contracts. So we tried to work within
- 17 the construct that we had understood was acceptable to
- 18 the Commission.
- **19 Q.** Is there anything that prevents NSP from filing a
- 20 rate case more frequently than it has in the past if the
- 21 need is driven by essential cost changes?
- 22 A. I believe we can file annually. I don't think
- 23 there's anything that prevents us from doing that.
- **24 Q.** I would refer you again to Exhibit 2, page 2.
- 25 A. Okay.

- 1 Q. It would be lines 23 and 24.
 - 2 A. Okav.
 - **3 Q.** And there you state "If the Commission were to
 - 4 approve a ROE of 9 percent in this case, we project
 - 5 that our actual 2012 earned ROE would be approximately
 - 6 6.3 percent."
 - **7** Do you see that?
 - 8 A. Yes.
 - **9 Q.** Okay. And then on the following page, 3, lines 18
 - **10** and 24, on line 18 you're listing factors, and it says
 - 11 "Significant increases in investment necessary to meet
 - 12 customers' needs" and then I guess it's actually line 23
 - 13 "our inability to completely update to actual costs
 - **14** through 2011."
 - **15** Do you see that?
 - 16 A. Yes
 - 17 Q. And, finally, on that same exhibit it would be
 - **18** page 6.
 - 19 A. Okay.
 - **20 Q.** Lines 4 and 5. And you state "The only factor the
 - 21 Commission can influence in this Docket to affect the
 - 22 company's actual 2012 earning opportunity is the
 - 23 authorized ROE."
 - **24** Do you see that?
 - 25 A. Yes.

- **1 Q.** Okay. Here's finally the question then: If actual
- 2 investments and costs are drivers of the difference
- **3** between actual and projected ROE, would it not be
- **4** appropriate to reflect these investments in cost changes
- **5** as known and measurable adjustments to the test year
- **6** rather than factoring the short fall into a higher ROE?
- 7 A. Could you repeat the question, please.
- **8 Q.** I will. It got long.
- 9 A. Okay.
- **10 Q.** So you had talked earlier and those were those
- **11** sections I showed you when you talked about actual
- **12** investments and costs are drivers of the difference
- 13 between actual and projected ROE.

So my question is would it not be more appropriate to reflect these investments and cost changes as known

- **16** and measurable adjustments to the test year rather than
- 17 factoring the shortfall into a higher ROE?
- 18 A. I think I can -- I think I understand the question.
- 19 I think part of the concern is that even if we were able
- 20 to -- the fact that we're working with a historical test
- 21 year creates a lag right off the bat.
- 22 So even if we factored in known and measurable,
- 23 we're still going to always be behind the revenue need
- and when we can change revenues to match up to thatrevenue need.
- 1 In the past our sales growth has been a mitigating 2 factor, and we've been able to offset -- with additional
- 3 revenue coming in with sales growth, it's been able to
- 4 mitigate the additional revenue needed perhaps for
- 5 investments. But there's too great a mismatch in our
- 6 current situation.
- **7** MS. CREMER: Thank you. That's all I have.
- 8 Thank you.
- **9** MR. SMITH: Thank you. We'll go to Commissioner
- 10 and advisor questions of Ms. McCarten.
- **11** Mr. Rislov.
- MR. RISLOV: When you file forecast test years
- 13 what's the basis of the revenue requirement that you're
- **14** requesting?
- 15 THE WITNESS: Mr. Rislov, I'm not an expert, but
- **16** generally the basis is, I believe, our forecast of
- 17 spending and revenue requirements in that future test
- 18 year, investments and other O and M costs.
- **19** MR. RISLOV: So considering historic test year
- 20 with, I think as Ms. Cremer stated, a look out front for
- 21 24 months, why couldn't you use that same forecast on a
- 22 historic test year basis?

- THE WITNESS: Mr. Rislov, hypothetically we
- 24 could going forward. In this particular case, that's not
- **25** the facts before us. That's not the basis of the case.

- And as I mentioned before, we just weren't able to gointo a full year of 2011 actuals.
- **3** MR. RISLOV: Could you explain to me what you
- **4** mean by that's not the basis of the case?
- **5** THE WITNESS: Mr. Rislov, as we sit here today
- **6** with the facts -- or with the decisions that are in play,
- 7 it's just the ROE and the Nobles recovery. We can't go
- 8 back and bring in additional cost, I guess is my point
- 9 sitting here today.
- **10** MR. RISLOV: Maybe we're confused a bit here.
- 11 I'm saying in general on a general basis you've talked
- 12 about historic test years. And let's assume this could
- 13 be any year.
- 14 Why can't you use that forecast as a basis for
- **15** filing for increased rates even when an historic test
- 16 year is used, considering that our rules allow you to go
- 17 out 24 months past the end date of the test year?
- 18 THE WITNESS: Agreed. The rules allow going out
- 19 24 months. I'm not certain how -- all of the costs that
- 20 would be incorporated in the 24 months. But in this
- 21 particular case based upon the work that we had done and
- 22 the discussions with Staff, we were at a 12-month
- 23 projection.
- So, yes, the law does allow 24 months in
- **25** practice. I think what we found is that what was
- 26
- 1 acceptable was 12 months of known and measurables tied to
- **2** specific contracts.
- **3** MR. RISLOV: But then as I read your testimony,
- **4** there seems to be general condemnation of historic test
- 5 years, that -- I guess I'm just trying to get to the fact
- 6 that there may be tools for you to take care of that
- **7** issue.
- **8** But if the company makes certain decisions in
- **9** processing a rate case, how can that be used to condemn
- 10 the usage of a historic test year?
- 11 THE WITNESS: Mr. Rislov, I wouldn't like to
- **12** characterize my testimony as a condemnation of a historic
- 13 test year but rather to point out that as all the things
- **14** are working together with the fact of a historic test
- 15 year with our investment needs and with our very low
- **16** sales growing, that creates facts that put us in the
- 17 position with the best financial performance that we
- **18** could hope for in 2012 is something that represents an
- could hope for in 2012 is something that represents a
- **19** ROE well below any reasonable level.
- So I didn't mean for my testimony to come acrossas a condemnation, just a recognition of a fact.
- MR. RISLOV: Would it be true that the company's
- 23 chosen prosecution of this case has a lot to do with that
- 24 shortfall, that there were tools available to the company
- 25 that the company didn't avail itself of?
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	29		31
1	THE WITNESS: Well, Mr. Rislov, I think the	1	Daniel Dane, D-A-N-E.
2	tool that you're speaking to is that the law permits the	2	A. Yes. I have that.
3	24 months?	3	Q. And is Mr. Dane a colleague of yours at Concentric
4	Is that the tool that you're speaking of?	4	Energy?
5	MR. RISLOV: That and general Commission policy	5	A. Yes.
6	over the last 30 years.	6	Q. And are you familiar with Mr. Dane's direct
7	THE WITNESS: I'm sorry. I'm not familiar to	7	testimony?
8	what you're referencing when you say general Commission	8	A. Yes, I am.
9	policy.	9	Q. And do you wish to adopt that direct testimony as
10	MR. RISLOV: Well, along known and measurable	10	your own testimony in this proceeding?
11	adjustments.	11	A. Yes, I do.
12	THE WITNESS: And, again, I can only say that	12	Q. Directing your attention briefly to all three Xcel
13	in working with Staff and based upon the precedence of	13	Energy exhibits that you are sponsoring, Xcel Energy 7,
14	the last rate case that was found acceptable, that was	14	8, and 9, do you have any corrections to any of those?
15	12 months. And we did seek to collect 12 months worth of	15	A. No, I do not.
16	known and measurables in our filing.	16	Q. And if I asked you the questions set forth, would
17	MR. RISLOV: Thank you.	17	your answers be the same?
18	MR. SMITH: Commissioner questions of	18	A. They would.
19	Ms. McCarten?	19	MR. JOHNSON: Mr. Coyne is available for
20	CHAIRMAN NELSON: None here.	20	cross-examination.
21	MR. SMITH: With that, Ms. Valley, redirect?	21	Excuse me. I probably omitted the most
22	MR. JOHNSON: A moment, Mr. Smith.	22	important part here.
23	MR. SMITH: Sure. Okay.	23	Q. Mr. Coyne, would you like to make an opening
24	MS. VALLEY: Thank you, Mr. Smith.	24	statement?
25	MR. SMITH: Please proceed.	25	A. I would. Thank you. Good afternoon, everyone.
	30		32
1	MS. VALLEY: We do not have any further	1	In my rebuttal testimony I demonstrate that the cost
1 2	MS. VALLEY: We do not have any further questions.	1 2	
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practical experience, however, investors often frame their return requirements, at least in part, by reference to returns available in other jurisdictions.

Returns available from other jurisdictions support my analysis and recommendation and show that Staff witness Copeland's 8.5 to 9.5 percent range and a 9 percent ROE recommendation are both well below in the authorized ROE for comparable electric utilities in the U.S.

My ROE range and estimate included 25 basis point adjustment for floatation costs, calculated based on the cost of public equity issuances.

I believe that it's appropriate to focus on public equity issuances because the company's very substantial capital investment will require levels of capital that will likely be obtained predominantly through public equity issuances, and the ROE should reflect those costs.

In this proceeding I have estimated the cost of equity for Xcel Energy South Dakota's jurisdiction, not the cost of equity for Xcel Energy the parent company which reflects Xcel Energy's other subsidiaries.

Focusing on the cost of equity of Xcel Energy

South Dakota's jurisdiction is consistent with sound financial principles as well as the stand-alone principle

of rate making.

I have established a group of companies that are both publicly traded and comparable to the company in order to perform my analyses. Mr. Copeland adopted the same group of companies. All the members of that group are vertically integrated, which means that, like the company, they own generation, transmission, and distribution assets.

It's important to focus for comparative purposes on other vertically integrated utilities because those companies are generally understood to be higher in the risk factor than electric or gas transmission distribution companies because their ownership of generating facilities means that they are subjected to operating risks to which transmission distribution electric utilities may not be exposed.

I've relied most heavily in my evaluation on the constant growth discounted cash flow for the DCF model. The constant growth DCF model is widely used in regulatory proceedings and has a sound theoretical basis.

One of the most significant disagreements between

Mr. Copeland and me is the appropriate long-term growth

rate that should be used in the DCF model. My use of the

earnings growth data is supported by both sound financial

principles and common practice before regulatory bodies such as this Commission. This is reinforced by the capability of my results to other ROE awards.

Expected earns growth rates are widely available and relied upon by both investors and analysts. Those growth rates reflect consensus estimates from several analysts rather than a single analyst or firm's expectations.

In contrast, Mr. Copeland's growth date is an exception to those practices and leads to results that are far outside the mainstream of other ROE awards.

In addition, in response to Mr. Copeland I have applied a multistage DCF model which uses different assumptions for both near and long-term growth. Again, Mr. Copeland and I disagree as to the long-term growth assumptions.

I have used nominal GDP growth as the expected long-term growth component. My use of nominal GDP growth is supported by both sound economic principles and reinforced by the use of GDP before several State Commissions as well as the FERC.

In contrast, Mr. Copeland's multistage model is not supported by sound economic principles nor common practice and his 8.42 to 8.45 percent results are even further from the other authorized ROEs demonstrating that his analysis is not a reliable indicator of the company's

1 cost of equity.

My application of the multistage DCF resulted in an average result of 10 percent for the proxy group. As stated in my rebuttal testimony, while the average result is below my recommended range of ROE for NSP, it's considerably more in line with current levels of authorized returns for integrated electric utilities than are the results of Mr. Copeland's multistage model.

Lastly, I performed a risk premium analysis that uses a lot of returns in equity as a proxy for required returns and determines the relationship between allowed returns and interest rates. One significant finding from that analysis is that as interest rates fall the risk premium required to support an investment in common equity rises. My risk premium analysis was used to corroborate the results of my other analyses, and with a mean result of 10.54 percent it largely did so.

I recognize that it is this Commission's responsibility to set a fair rate of return for the company. And I submit that my recommended ROE is consistent with that rate return standard.

Mr. Copeland's recommended ROE is 80 basis points
below the lowest of all allowed ROEs in the past three
years. It would not pass this basic test of fairness.
I appreciate the opportunity to appear before the

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Commission, and I look forward to answering your questions regarding my analysis and testimony. Thank you.

4 MR. JOHNSON: Mr. Smith, now Mr. Coyne is 5 available for cross.

6 MR. SMITH: Thank you.

7 Ms. Cremer.

MS. CREMER: Staff would have no questions.

9 Thank you.

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10 MR. SMITH: Okay. Well, then we'll go to 11 Commissioner and advisor questions.

12 Chairman Nelson.

CHAIRMAN NELSON: Mr. Coyne, a couple of questions. In Mr. Dane's testimony on page 34 it talks about Xcel's CAPX expectations being significantly larger than the peer group.

17 Why is that?

THE WITNESS: My understanding of that, Mr. Chairman, is that the company is engaged or the companies in the case of NSP are engaged in a program requiring significant investments largely in transmission and generation over the next five years. In addition to that they have a program of fairly substantial

24 environmental expenditures along with basic spending at

25 the distribution level.

> But as I looked at the data it was really in the generation and transmission side that were really driving those numbers. And to your question as to why those numbers are different for NSP versus the proxy group -is that the thrust of your question?

6 CHAIRMAN NELSON: Yes.

THE WITNESS: I can only surmise, but in attempting to do so I would attribute that either to service areas that are growing more rapidly, requiring greater investment in those assets and/or environmental laws that are impacting the companies in the near term more -- to a greater extent than they are the proxy group.

But I have not attempted to decompose the sources of growth at each of those companies, only the absolute magnitude of their five-year capital plans.

17 CHAIRMAN NELSON: You know, I'm most curious 18 about the generation component of that because 19 Ms. McCarten has already testified that at this point 20 their sales are flat. And so I'm really puzzled by 21 what's causing that need for great expenditure on 22 generation.

23 Can you expound on that?

24 THE WITNESS: My knowledge on that is limited to 25 a report that I looked at at the Xcel level. And I think

1 the company is probably a greater source of expertise on 2 that.

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3 But what I learned by looking at it at the Xcel level is that over the next 10 years it is the company's 4 plan to become less coal intensive and more renewable 6 intensive.

CHAIRMAN NELSON: So if I understand you correctly, the company is choosing to move from one fuel source to another fuel source, thereby creating large capital expenditures. Is that correct?

THE WITNESS: I didn't get the impression choose as much as the impression I got was one of environmental requirements or renewable portfolio standards that were driving that.

But, again, I would defer to the company in terms of the actual underlying basis for that capital expenditure plan.

CHAIRMAN NELSON: Thank you.

The next question that I have deals with -- and your testimony and I think Mr. Dane's testimony. Numerous mentions about the talk about your belief that you have to have the ROE in your particular range in order to attract capital. Many, many references to that and even quote the South Dakota Supreme Court decision

25 talking about needing to have sufficient return in order

1 to attract capital.

> 2 I've looked through the testimony, I've read 3 through it a number of times, and I'm looking for some 4 quantification of that. And I'm not finding it.

5 And by that I mean if we set it at 10.5, what 6 type of capital can you attract versus 10 versus 9.5 7 versus 9? I'm looking for some quantification of that 8 difficulty.

And you've said many times there's going to be a difficulty. I'm looking for a quantification of that, and I can't find it. Can you help me out with that?

THE WITNESS: Nor will you. And the reason for 13 that is when we think about utilities in terms of what 14 they are, they represent very long-term capital

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investments. By and large the assets of any utility are 16 20-, 30-, 40-year assets or longer. And as a result of

17 that, utility management and shareholders understand that

18 they're making long-term investments. And so their 19 capital is committed for long term.

20 So by and large over the long term they expect a 21 fair and reasonable return in order to keep that capital invested in the enterprise. 22

23 In a given year if the Commission fails to meet 24 that test, so to speak, will the Commission pull up 25 stakes and move out of town because it wanted 10.5 and it

1 got 9.5? As a practical matter we know the answer is no. 2 So capital attraction is really -- it's a 3 long-term concept. But there are really three standards 4 to that stool of fair return. The minimum threshold is 5 integrity, maintaining the financial integrity of the 6 firm. And that's maintaining basic cash flows to allow 7 it to meet debt obligations and things of that nature. 8 Attraction is probably a standard that lives in 9 close proximity in that you must be able to attract, in 10

particular, equity capital over time. Otherwise, what 11 utilities will tend to do is they will make basic 12 investments in the utility but when it comes to expansion 13 capital and other investments they'll look elsewhere 14 where they have better returns and fair returns in their 15 estimation. It does happen. It doesn't happen 16 overnight.

But the third leg of that stool by and large I'm focused on as well is comparability. Investors will look to the comparability of those returns in South Dakota versus what they can earn elsewhere.

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And the analysis that we've provided shows that by and large, the -- at least as recommended by Staff witness, that argument would certainly not pass the comparability test.

CHAIRMAN NELSON: But what you're telling me is

there's no way to quantify how much more difficult capital attraction would be at one ROE versus another? THE WITNESS: You really cannot. No. It's a practical matter.

I've seen a case in some jurisdictions over time where a utility holding company was so frustrated by inadequate returns that it ultimately decided to sell the utility. That really is the ultimate -- I guess you can say utility management is two resorts.

One is that it can hold back in capital expenditures that might otherwise be made in that jurisdiction. And over time the ultimate option it has is to ultimately exit the business.

14 CHAIRMAN NELSON: But if you can't quantify that 15 difficulty of attracting capital, how can you be assured 16 that that's going to happen?

THE WITNESS: That you will not --

18 CHAIRMAN NELSON: Be able to attract sufficient 19 capital at 9 and a half versus 10 and a half or 9 versus 20 10, any number versus another.

21 THE WITNESS: Well, it stands to reason. If you 22 think of ourselves as individual investors, if you 23 maintain a 401(k) or anything like that, if you're 24 presented with two options of comparable risk and one is

earning an 8 percent return and one is earning a

1 10 percent return, every one that was in that 8 percent return asset overnight may not leave it but over time, 3 over the course of several years you would expect them to move to the 10 percent asset. Because if it's of the 4 5 same risk, they will move there.

6 So capital movement in reality is not perfect. It takes years for that to occur. But you would expect 8 that in the grand scheme of things Xcel -- in this case 9 Xcel would be investing in jurisdictions where it felt as 10 though it could earn a fair rate of return, both from an 11 allowed sense as well as a earned return, and ultimately 12 it's the earned return that is most important.

13 CHAIRMAN NELSON: Thank you. 14 THE WITNESS: You're welcome. 15 MR. SMITH: Other Commissioner questions?

16 Mr. Rislov?

17 Oh, Commissioner Hanson. 18 COMMISSIONER HANSON: Thank you, Mr. Smith. 19 Mr. Coyne, Gary Hanson. Thank you for your 20 testimony. I found it real interesting. I'm real 21 dangerous because a little knowledge is a dangerous 22 thing, and I have very little knowledge. How is that? 23 I tried to minor in everything when I was in

24 college, and economics was one of them. And psychology 25 is another so I try not to practice either one of those

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However, looking at your chart that we have, at 3 least it's on my page 4 of Xcel's brief overview, shows 4 that -- well --

5 THE WITNESS: Commissioner, pardon me. So I can 6 get with you, which exhibit is that?

7 COMMISSIONER HANSON: It shows the authorized 8 ROEs for integrated electric utilities, January 1, 2010, 9 to March 31, 2012, and it shows the number of regulatory 10 ROE decisions during that time.

11 THE WITNESS: I believe that's in my rebuttal 12 testimony.

13 COMMISSIONER HANSON: I think it was in your June 6 brief. I'm not certain of that, but I have a --

14 15 MR. SMITH: The brief?

16 COMMISSIONER HANSON: It's the Xcel Energy 17 brief, and it starts out on page -- it's on page 4.

18 MR. SMITH: Commissioner Hanson, may I? He 19 doesn't have access to the brief. So all he has access 20 to are exhibits admitted into evidence.

21 COMMISSIONER HANSON: Okay. There's a footnote 22 to this chart that says that you prepared this, and it

23 shows Coyne Rebuttal at 6 as the source.

24 THE WITNESS: I have the chart, Commissioner. 25 Thank you.

COMMISSIONER HANSON: Thank you. There's a huge disparity in the graph there. No accident. That's why you presented it.

THE WITNESS: There is, yes.

COMMISSIONER HANSON: It's real interesting to me for that reason and, of course, when you first look at things like that you want to delve into it further.

In your -- you know, looking at it, even if I were to accept your chart and your premise, I would think that instead of 10.65, that it would be a lower percentage than that. Because it seems to imply that

12 Xcel has a higher risk than all of those 79 other13 regulatory ROE decisions that you present.

Why is -- without -- I don't want to say that Xcel -- does Xcel have a higher risk to investors than all of these other -- or a majority of these 79? Why wouldn't it be in the lower third or somewhere in that vicinity?

THE WITNESS: Well, in my quantitative analysis -- well, first of all, just to ground the discussion, if I may, those are allowed returns. And, of course, the analysis that I've done is the estimated required return for NSP South Dakota.

So they're different numbers in that sense. ButI showed them for a reason. Because I do test my results

against allowed returns elsewhere, and that's the purpose of this chart. So your question is a fair one.

And as to your question pertaining to risk, I do not make a specific adjustment for risk for NSP South Dakota versus the proxy group. But I do note that for two reasons I could have.

One is that its level of capital spent, as we just spoke about with the Chairman, is much greater than it is for the comparable companies. And capital spent in general creates risks for companies and even more so for companies that may have a problem with regulatory lag has been experienced by NSP South Dakota.

Secondly, it's a smaller company than these companies. We know it's part of a larger holding company, but according to the principle of stand-alone rate making, you would look at NSP South Dakota on a stand-alone basis. And its rate base is on the order of about 330 million versus by and large these integrated companies that we're looking at here is much larger.

So it's small in size, large capital spent, all would suggest that NSP South Dakota is towards the right end of the risk spectrum, but I used the median of our results in terms of making the recommendation. I didn't make a specific adjustment for it.

But I would note the 10.65 there recommend is

certainly well within the range of these returns over
 that period of time. The mean over the most -- over this
 entire period was 10.39. So that's within shouting
 distance of the 10.65 that I have recommended.

COMMISSIONER HANSON: Within shouting distance.That's another economic term I didn't learn in school.

7 THE WITNESS: That's probably more the8 psychology side than the economic side.

9 COMMISSIONER HANSON: Well, the -- perhaps I
10 shouldn't. I see you're footnoted so many times here,
11 and you don't have this in front of you.

12 THE WITNESS: I have the charts here so I can13 look at that.

14 COMMISSIONER HANSON: Well, I'll contemplate how
15 much of what you said I'm going to agree with as I move
16 from the chart to something else.

There's some statements that the -- I've lost my place to an extent. But Xcel determines that the growth rate should be based solely on forecast earnings growth.

Solely on forecast earnings growth.

Aren't investors more sophisticated than that, especially the large investors? Although seeing one lose \$2 billion, one wouldn't assume so. But not withstanding that, should one assume that investors look at other things besides that?

THE WITNESS: Without a doubt. They look at the full body of information that's available to them in the marketplace.

The basis for looking at earnings growth in the context of the DCF model is that it's consistent with the models' assumptions and consistent by and large with how that model is used before a regulatory body such as this.

The advantage -- cost of capital estimation isn't a perfect science at best. The advantage of using earnings forecast is that you have them from a variety of analysts so you can cover a broad spectrum of what the market is thinking regarding that company's future.

And you can compare across many analysts what goes into the numbers that I have used in those earnings estimates are consensus forecast as collected by both -- from two different sources. In addition to that Value Line, which conducts an independent estimate of earns per share.

So you have a broad base of market information, and the advantage of using earnings is it's consistent across all three so they're all looking at the same thing.

The basic underlying assumption of the DCF model
is that earnings and dividends, which they care about
book value per share, will all grow at the same rate.

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And that's just one of the basic underlying assumptions behind the DCF model so it's consistent with the model that you're using. It's what's widely used before other regulatory bodies.

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And you're not subject to using estimates from a single firm or another source where you can get single sourced biased estimation. So for that reason it's by and large accepted.

One of the advantages of the DCF model is that I know you all know -- even though I know that litigator are we in this jurisdiction is relatively new in the grand scheme of things, you've probably heard from your colleagues in other jurisdictions that listening to duelling analysts such as myself on these matters is probably not how you want to fill your regulatory calendar.

And the nice thing about the DCF model is that the assumptions that go into it are relatively straightforward and there's not a high level of judgment that goes into them.

You calculate a stock price based on recent market averages. You calculate dividend yield based on actual announced dividends for the company. And you calculate a growth rate based on projections from a wide number of analysts. You put them together, and you have

the DCF result. So it's fairly straightforward.

When you start looking at alternative measures of growth that you want to put into the DCF model, well, now you get into a whole new level of adjustment around how that model is going to be used.

What I like about the DCF is from an analyst perspective what you see is what you get. It's fairly straightforward. The CAPM model, which is the other alternative that's used that I believe Mr. Copeland and I are both in agreement that that's not provided proper estimates.

Another one of the problems with the CAPM model is that any given analyst will choose a different set of assumptions to go into it. So there's just a wide degree of speculation that gets associated with that model. With the DCF model and the use of analyst estimates you get something that's fairly straightforward. And in my experience you usually get a very narrow difference between the analysts that adopt the model from a regulatory standpoint. That's a good thing it.

I hope that was responsive to your question.

21 22 COMMISSIONER HANSON: It was. More so than what 23 I thought you would. The discounted cash flow method is 24 really interesting. I think to a great extent 25 appropriate.

1 I'm struggling with the risk portion. It just 2 would seem maybe it's because I feel safer in 3 South Dakota than -- for my physical self than in other 4 areas that I just think that investments in utilities in 5 South Dakota are safer as well than in some other 6 iurisdictions.

With no intent to dis my fellow regulators in other states, but I think that at least from what I've read that utilities are far more comfortable in South Dakota than in other areas.

So just because of the size, investments, things of that nature, I'm struggling with your answer on the risk factor. It just seems like there's lower risk in South Dakota for Xcel than in, excuse me, Minnesota.

15 THE WITNESS: Well, if you look, on the risk 16 issue an investor again would focus on both the allowed 17 return as well as the earned return. And I think an 18 exception that to -- the investor might take issue with 19 is the issue that was addressed by company witness 20 McCarten, and that is one of regulatory lag that leads 21 to a substantial difference between allowed and earned 22 ROE. 23

That represents a significant risk factor for an investor because they don't know what -- how that allowed ROE is going to translate into an earned ROE,

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1 and it's really the earned that generates cash flow for 2 investors.

3 So beyond that, the South Dakota economy is 4 strong. That's a good thing from an investor 5 perspective. The rate of GDP growth in the state is 6 faster than it is for the rest of the nation.

Over the last five years the rate of growth has been -- over the last year it's been 9th highest in the U.S. and well above the U.S. average. So that's a good thing from a utility perspective and from a utility investment perspective.

12 But I would just suggest that a continuation of 13 a reasonable allowed return and the opportunity to earn 14 that return are probably the biggest gaps that I would 15 see.

COMMISSIONER HANSON: When you look at regulatory lag do you take into consideration that the legislature through the support of the South Dakota PUC significantly decreased the siting requirements for wind energy, for instance, and has worked to introduce a number of pieces of legislation to make investment more attractive in South Dakota?

23 THE WITNESS: My understanding are those are 24 helpful, but it's the -- from our analysis on this issue, the biggest single factor probably that impacts that

53 55 1 1 group that I looked at. That's a very large gap. issue is a historical test year versus a forecast test 2 2 year. MR. RISLOV: I could go on on that, but I think 3 COMMISSIONER HANSON: Oh, really? Okay. 3 I'll bore everyone if I do. 4 THE WITNESS: I didn't come here prepared to 4 Would you give me your definition of the risk 5 offer you testimony on that issue but -free interest rate and what securities determine that. 6 COMMISSIONER HANSON: We're familiar with it. 6 THE WITNESS: In this field of practice most of 7 7 THE WITNESS: I would imagine. us have used Government treasury bonds as a measure of 8 8 COMMISSIONER HANSON: Thank you. the risk free rate. You know, we've had to rethink that 9 9 Thank you, Mr. Smith. Thank you, Mr. Coyne. over the last two years. 10 THE WITNESS: You're very welcome. 10 But by and large most still use risk free 11 11 MR. SMITH: Any other Commissioner advisor Government bonds 10 to 30 years depending on the term 12 questions? 12 you're looking at as a measure of risk free rate. 13 13 Mr. Rislov. MR. RISLOV: How would you define the transition 14 MR. RISLOV: Hello, Mr. Covne. 14 period on your dividend discount model? 15 THE WITNESS: Good afternoon. 15 THE WITNESS: In terms of length of time? 16 16 MR. RISLOV: Yes. I noticed there was a MR. RISLOV: I hope you recall some of the 17 questions I asked Ms. McCarten and maybe a question Staff 17 difference between yours and Mr. Copeland's. 18 18 asked too, but I keep hearing regulatory lag and historic THE WITNESS: Yes. I have a 10-year transition 19 test years and I read some testimony regarding that that 19 period built into my model. 20 20 regulatory lag may work both ways and I read some MR. RISLOV: And how would you -- describe the 21 21 testimony that it doesn't. three periods. We have the short-term, the transition, 22 22 we have the long-term. Could you explain I guess in more But the issue was brought up that Xcel didn't 23 file the rate case from 1992 to 2009. And why would that 23 detail than what I saw in either of your testimony the 24 be? 24 definition of each period and why they are what they 25 25 THE WITNESS: And why would that be? are. 54 56 1 1 MR. RISLOV: Why would that be, do you suppose? THE WITNESS: Yes. Maybe I could direct you to 2 an exhibit too that would assist in that matter. THE WITNESS: I can't speak to the company's 3 3 If you turn to I guess we're marked as condition specifically, but from an industry standpoint, 4 that wasn't uncommon. And there were periods of time 4 exhibit -- that's Xcel Exhibit 8 and page 22. That would 5 where -- after the period of significant inflation during 5 probably help us. Perhaps I could provide the detail 6 the mid to late '80s where utilities were able to live 6 around that chart there that perhaps you're asking about. 7 within their allowed rates and they could stay out for 7 Do you have that in front of you, Mr. Rislov? 8 8 long periods of time. MR. RISLOV: I don't have the official markings. 9 MR. RISLOV: And possibly earn returns above 9 Could you tell me whose exhibit that is and --10 10 those allowed? THE WITNESS: Oh. This would be rebuttal Coyne. 11 11 THE WITNESS: The possibility would exist that And it would be page 22 of that testimony. 12 they could be above or below. Yes. 12 MR. RISLOV: You can go forward. I think I have 13 13 I've only looked for -- as Ms. McCarten it memorized anyway, but I'll get there in a second. 14 14 indicated in her testimony, I've only looked at the last THE WITNESS: All right. There are three -- and 15 two years of data that I saw from her. 15 this is the typical way that when you're estimating a 16 But I have looked at it not in this case but I 16 multistage DCF model that it gets done. 17 17 did just look at it in another case for a group of -- oh, You have the beginning period which takes you to 18 18 the limits of the market analyst forecast. And there you it was a proxy group of about 10 companies, and I looked 19 at their allowed versus earned returns. And by and 19 can see, as did I, with the constant growth model that I 20 20 large -- and this went back over a long period of time. have used a average of Value Line, Zacks, and First Call 21 21 I want to say it was ten years. projected growth rates. So those get me out through the 22 And by and large they bounced around back and 22 year 2015.

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Let's go to the last stage, and then I'll talk

the long-term nominal GDP growth rates, and that number

about the transition. For years 11 and beyond I go to

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forth, but they were within on average 30 to 40 basis

surprised when I saw the difference here versus that

points difference in allowed and earned. And I was quite

1 is, I believe, 4.93 percent. 2 MR. RISLOV: And

MR. RISLOV: And I understand that. I guess I was looking for your determination of what term is a length of period of time for that transition and when it

begins and when it ends.

THE WITNESS: I see.

MR. RISLOV: You know, something more than what you actually did. Why did you -- why did you do it that

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THE WITNESS: Why did I choose that period of time? It's largely judgment. I should say that it's largely -- it's largely practice in this field as well.

Most analysts that estimate multistage models typically

beyond year 10 you're running out of typical analystsforecasts of most financial market indicators and

16 anything to do with the stock price of a given company.

So if you go into multistage group, you need to go to some other driver. So I think that, you know, year

10 is probably about as far as you can go out.

The real reason for a transition is that you can get an awkward jump in your model if you go from the analyst forecast on the front end to whatever you believe that long-term growth rate is going to be. So it just gives you a more sensible model result.

The transition period that I've used is five

years. Again, that's highly typical. I think if you

look at 10 analysts that do this work, you'll probably

3 find that 9 out of 10 use that framework. It's 5, 5, and

4 10. If you go to the Staff model, for example, that's

5 widely used in Wisconsin, that's the model that they use.

And the transition is simply that. It's the geometric transmission from where you leave off with the

8 analyst's forecast to get to that GDP growth rate. So

9 let's just say for the sake of argument my analyst

forecast growth rate is 5 percent. And I'm trying toget -- no. Let's make it a different number. Let's make

12 it 6 percent. And I'm trying to get to that 4.93 over

13 those five years. I would go 5.9, 5.8, 5.7, et cetera,

so I get a gradual geometric transition to that long-term

15 path.

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You're modeling discounted cash flows so you get a more sensible result from doing that. If you go to your long-term growth rate away, you're going to get a much bigger impact on that. I would characterize it as a long-term guess for growth by the time you get to that long-term multiplier. And you go to that sooner than you want, and you probably distort the modeling results more

23 than you prefer to.

MR. RISLOV: And again I apologize for nothaving the official markings. I'm looking at witness

Copeland's testimony, rebuttal testimony, page 13. If Icould direct you there.

3 THE WITNESS: Yes. I have that.

4 MR. RISLOV: And I assume I could pick out a5 whole number of lines, but I'm going to take you to

6 line 4, a sentence starting there and down to the end of7 line 8 and if you would review that.

8 THE WITNESS: Yes. I see that.

9 MR. RISLOV: And I think if we go down a page,

10 there's a chart that graphically depicts what

11 Mr. Copeland has stated. It's I think entitled graph

12 2-1.

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13 THE WITNESS: Yes. I see that.

14 MR. RISLOV: I would like to know your

15 impression, your comments, in response to what

16 Mr. Copeland has said.

THE WITNESS: Well, it was a distortion of my work is probably the only way to cut to the chase. I have not recommended 13.84 percent in perpetuity as

20 suggested in Mr. Copeland's testimony.

And the line chart just draws from that erroneous conclusion on the prior page. It's -- I think in my opening statement I suggested my recommended

24 results were 10.4, 10.9. There's no 13.84 in there.

In my surrebuttal testimony I went through the

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1 same calculation that he made there around his payout

2 ratio and I could get to an equally ridiculous result but

3 it would be distorting his work as well.

4 MR. RISLOV: And maybe I'm confused. Excuse me.

5 But if we go back to the actual testimony beginning on

6 line 4 and ending on line 8 on page 13 and 30. I guess

7 I'm confused. Where is that wrong? Where has he made

8 his mistake?

9 THE WITNESS: He is -- well, he's -- he's

10 implying that there is a 13 -- well, he's made a mistake

11 in terms of his conclusion, but it's the logic that gets

12 to his conclusion that I guess you could say is a

13 mistake. He's suggesting that my implied ROE is 13.84

14 percent on line 8, and there is no implied 13.84 anywhere

15 in my testimony.

My constant growth -- he's looking at a 4.63percent growth rate. The growth rate that's in the

18 constant form of a DCF is a little bit higher than that,

19 and my results are much lower than 13.84. So it's -- the

20 13.84 is not contained in my analysis. It's -- he's

21 dividing by a -- he's dividing the 4.63 -- well, first of

22 all, I don't think -- I didn't use 4.63, and he's

23 dividing it by one minus the retention growth rate.

But what he's missing from that is that I also have -- there are two facets to this, how fast earnings

- are growing, as well as the retention growth rate. And
 none of that gets to 13.84 in my analysis. It's wrong.
 MR. RISLOV: I guess, you know, we were
- 4 really -- or he was discussing retention rates. And, you
- **5** know, perhaps the growth rate received a lot more
- **6** attention within the testimony of both of you than the
- 7 retention rate.
- 8 And I guess there is a difference. I can't
- ${f 9}$ recall offhand. Mr. Copeland was around 60 percent, I
- 10 believe.
- 11 THE WITNESS: That's correct. He was at
- **12** 61 percent, and I was at 66.5. And the basis for that
- 13 was the industry average retention rate that I calculated
- 14 from the last, oh, decade or two.
- 15 So the retention growth rate they've used, and
- **16** maybe that's the real difference there, is based on an
- 17 industry average that I computed going back. I think it
- **18** was since 1990, as I recall. But I could double-check
- **19** that.
- 20 And he has used one that was a -- if I'm
- 21 correct, I think it was a Value Line retention, an
- 22 average of Value Line for the proxy group for the year
- **23** 2015.
- 24 And the issue that I took with that in my
- 25 surrebuttal testimony is the industry right now -- not
- 1 just the NSP but the industry in general is in a period
- 2 of rapid capital expansion for the factors that we
- 3 discussed earlier. And as a result of that I don't think
- 4 that these near term retention rates are characteristic
- **5** of where the industry has been in the past and where it
- 6 will be in the long run.
- **7** So I felt as though the 66.5 was a more
- 8 reasonable picture of what those retentions looked like
- 9 in the long run.
- **10** MR. RISLOV: Thank you.
- **11** MR. SMITH: Any other Commissioner questions?
- We will then go back to Xcel.
- MR. JOHNSON: Mr. Smith, may I take a moment
- **14** again?
- **15** MR. SMITH: You may.
- **16** (Pause)
- 17 MR. SMITH: Are you ready to go?
- **18** MR. JOHNSON: Yes. Thanks, Mr. Smith.
- 19 <u>REDIRECT EXAMINATION</u>
- 20 BY MR. JOHNSON:
- **21 Q.** Mr. Coyne, I'd like to direct your attention back to
- 22 some discussion you had with Chair Nelson with respect to
- 23 the elements of investment that are reflected in that bar
- 24 chart.
- **25** Do you recall that generally?

- 1 A. Yes, I do.
- 2 Q. And, as you recall, you indicated that a portion of
- 3 that was a move towards renewables, and there was
- 4 question as to why that was appropriate or how it related

- 5 to this case.
- 6 Do you recall that?
- 7 A. I do recall.
- **8 Q.** I'd like to direct your attention, if I might, to
- **9** the -- the direct testimony of Ms. McCarten. You can
- 10 find that.
- 11 THE WITNESS: Would that be marked Xcel
- **12** Energy --
- MR. SMITH: I think that's 1.
- **14** THE WITNESS: 1. Thank you.
- **15 Q.** And you had indicated that your knowledge of the
- 16 specifics of the Xcel Energy investments was somewhat
- 17 limited.
- 18 A. Yes, I did.
- **19 Q.** Do you now have that Exhibit 1 in front of you?
- 20 A. I do.
- 21 Q. I'd like to direct your attention to page 5 of that
- **22** exhibit. And please scan that just for a few moments.
- 23 (Witness examines document)
- 24 A. I have scanned it.
- 25 Q. Now with having seen that available, am I correct in
- 1 concluding that a significant portion of the investments
- 2 that are referred to in your bar chart pertain to nuclear
- 3 generating facilities?
- 4 A. They do, according to Ms. McCarten's testimony.
- **5 Q.** And, of course, I assume you have no reason to doubt
- 6 that?

- 7 A. I have none.
- **8 Q.** And there is also references to environmental
- **9** upgrades of coal generating facilities?
- 10 A. There are.
- 11 Q. Transmission investments?
- 12 A. There are.
- **13 Q.** And distribution and other miscellaneous investments
- 14 as well.
- 15 A. That's correct.
- **16 Q.** So the upper -- or the renewable energy initiatives
- 17 of Xcel Energy are occurring in this context?
- 18 A. That would be correct.
- **19 Q.** You had some dialogue with Commissioner Hanson with
- 20 respect to risk factors as pertains to South Dakota. Do
- 21 you recall that?
- 22 A. I do.
- 23 Q. You indicated, as I recall, that investors look at
- 24 factors such as historic test years, low ROEs, and
- 25 regulatory lag as sources of concern.

	65		67
1	A. Yes.	1	might do in Minnesota. But in response to do you have
2	Q. That's in the context, of course, of the strong	2	any recross directed to the Commissioner advisor
3	growth and the economic base in South Dakota.	3	questions?
4	A. Yes.	4	MS. CREMER: No, we don't. Thank you,
5	Q. Have any of the rating agencies identified historic	5	Mr. Smith.
6	test years, low ROEs, and regulatory lag as risk	6	MR. SMITH: Thank you. I think then we're
7	factors?	7	are we done then with Mr. Coyne for now, Xcel?
8	A. They certainly have.	8	MR. JOHNSON: Yes, we are, Mr. Smith. Thank
9	Q. Would Standard & Poor's be one of those?	9	you.
10	A. My presumption is, yes, both Standard & Poor's and	10	MR. SMITH: Thank you. You may step down then.
11	Moody's both look at those issues which we follow.	11	Cheri, I'm going to look at you, but first I'm going to
12	Q. Now you had some discussion with respect to whether	12	ask Xcel this: Do you have any additional witnesses to
13	or not you could quantify the effect of ROEs ranging from	13	call at this time related to the issue of ROE and the
14	10.5 down to 9. Do you recall that generally?	14	other rate of return matters?
15	A. Yes, I do.	15	MR. JOHNSON: We do not.
16	Q. I recall you indicated you would be unable to	16	MR. SMITH: Cheri, is it break time? We're in
17	quantify the effect of a move of 50 basis points one way	17	recess for 10 minutes.
18	or the other? I said quantify not	18	(A short recess is taken)
19	A. Quantify, yes.	19	MR. SMITH: I will now call the hearing back to
20	Q. Yeah. And my question is simply this. Are there	20	order in Docket EL11-019. We have concluded Xcel's
21	many economic or are there some economic phenomenon whose	21	direct case regarding the issue of rate of return and
22	effect is recognized but which cannot be quantified down	22	capital structure.
23	to a single plus or minus calculation?	23	And we will turn to Staff for your direct case
24	A. Certainly.	24	on this issue.
25	Q. And why is that? Is that why is that?	25	MS. CREMER: Thank you, Mr. Smith. Staff would
	66	+	68
1	A. Well, the computation of first of all, we're	1	call Basil Copeland, please.
2	talking about the context of equity securities, and	2	BASIL COPELAND,
3	equity securities move in a market that's influenced by a	3	called as a witness, being first duly sworn in the above
4	host of factors.	4	cause, testified under oath as follows:
5	And we have models such as those that I have relied	5	DIRECT EXAMINATION
6	upon here that attempt to incorporate the range of	6	BY MS. CREMER:
7	factors that move the price of securities and determine	7	Q. Would you please state your name and address for the
8	their values. But they're not perfect models in that	8	record.
9	sense.	9	A. Yes. My name is Basil L. Copeland, Junior. My
10	selise.	"	A. Tes. My fiame is basil L. Copeland, Juliot. My
	And the amount of information that investors will	110	address is 14619 Corvallis Poad, Maumelle, Arkansas
	And the amount of information that investors will	10	address is 14619 Corvallis Road, Maumelle, Arkansas.
11	factor in can never fully be accounted for in any such	11	Q. Would you briefly explain whom Chesapeake Regulatory
11 12	factor in can never fully be accounted for in any such modeling exercise and definitely quantified. One can	11 12	Q. Would you briefly explain whom Chesapeake Regulatory Consultants are and how CRC came to be associated with
11 12 13	factor in can never fully be accounted for in any such modeling exercise and definitely quantified. One can only hope to do the best they can with the information	11 12 13	Q. Would you briefly explain whom Chesapeake Regulatory Consultants are and how CRC came to be associated with this Docket?
11 12 13 14	factor in can never fully be accounted for in any such modeling exercise and definitely quantified. One can only hope to do the best they can with the information you have available to you.	11 12 13 14	 Q. Would you briefly explain whom Chesapeake Regulatory Consultants are and how CRC came to be associated with this Docket? A. Chesapeake Regulatory Consultants was formed in 1986
11 12 13 14 15	factor in can never fully be accounted for in any such modeling exercise and definitely quantified. One can only hope to do the best they can with the information you have available to you. Q. Does that have any effect on the reality of the	11 12 13 14 15	 Q. Would you briefly explain whom Chesapeake Regulatory Consultants are and how CRC came to be associated with this Docket? A. Chesapeake Regulatory Consultants was formed in 1986 when Bob Towers, myself, and Al Clark left the firm of
11 12 13 14 15	factor in can never fully be accounted for in any such modeling exercise and definitely quantified. One can only hope to do the best they can with the information you have available to you. Q. Does that have any effect on the reality of the economic effect?	11 12 13 14 15 16	 Q. Would you briefly explain whom Chesapeake Regulatory Consultants are and how CRC came to be associated with this Docket? A. Chesapeake Regulatory Consultants was formed in 1986 when Bob Towers, myself, and Al Clark left the firm of Hess and Lim. Mr. Towers at that time I think had a
11 12 13 14 15 16	factor in can never fully be accounted for in any such modeling exercise and definitely quantified. One can only hope to do the best they can with the information you have available to you. Q. Does that have any effect on the reality of the economic effect? A. Would you kindly rephrase your question.	11 12 13 14 15 16 17	 Q. Would you briefly explain whom Chesapeake Regulatory Consultants are and how CRC came to be associated with this Docket? A. Chesapeake Regulatory Consultants was formed in 1986 when Bob Towers, myself, and Al Clark left the firm of Hess and Lim. Mr. Towers at that time I think had a working relationship with the Commission Staff, and I
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11 12 13 14 15 16 17 18 19 20 21	factor in can never fully be accounted for in any such modeling exercise and definitely quantified. One can only hope to do the best they can with the information you have available to you. Q. Does that have any effect on the reality of the economic effect? A. Would you kindly rephrase your question. Q. Does the fact you can't quantify it negate the reality that there are A. Not at all. We all know there are a host of factors that move markets, and we cannot factor all of them. MS. VALLEY: Those are the only questions I	11 12 13 14 15 16 17 18 19 20 21 22	 Q. Would you briefly explain whom Chesapeake Regulatory Consultants are and how CRC came to be associated with this Docket? A. Chesapeake Regulatory Consultants was formed in 1986 when Bob Towers, myself, and Al Clark left the firm of Hess and Lim. Mr. Towers at that time I think had a working relationship with the Commission Staff, and I know that we continued that when we formed the CRC. And I've worked for the Staff on many cases over the years. I've racked my brain trying to remember when it was I was here last, but it was in the past century. Q. All right. We'll go with that.
11 12 13 14 15 16 17 18 19 20 21 22 23	factor in can never fully be accounted for in any such modeling exercise and definitely quantified. One can only hope to do the best they can with the information you have available to you. Q. Does that have any effect on the reality of the economic effect? A. Would you kindly rephrase your question. Q. Does the fact you can't quantify it negate the reality that there are A. Not at all. We all know there are a host of factors that move markets, and we cannot factor all of them. MS. VALLEY: Those are the only questions I have. Thank you.	11 12 13 14 15 16 17 18 19 20 21 22 23	 Q. Would you briefly explain whom Chesapeake Regulatory Consultants are and how CRC came to be associated with this Docket? A. Chesapeake Regulatory Consultants was formed in 1986 when Bob Towers, myself, and Al Clark left the firm of Hess and Lim. Mr. Towers at that time I think had a working relationship with the Commission Staff, and I know that we continued that when we formed the CRC. And I've worked for the Staff on many cases over the years. I've racked my brain trying to remember when it was I was here last, but it was in the past century. Q. All right. We'll go with that. Would you briefly describe your educational
11 12 13 14 15 16 17 18 19 20 21 22	factor in can never fully be accounted for in any such modeling exercise and definitely quantified. One can only hope to do the best they can with the information you have available to you. Q. Does that have any effect on the reality of the economic effect? A. Would you kindly rephrase your question. Q. Does the fact you can't quantify it negate the reality that there are A. Not at all. We all know there are a host of factors that move markets, and we cannot factor all of them. MS. VALLEY: Those are the only questions I	11 12 13 14 15 16 17 18 19 20 21 22	 Q. Would you briefly explain whom Chesapeake Regulatory Consultants are and how CRC came to be associated with this Docket? A. Chesapeake Regulatory Consultants was formed in 1986 when Bob Towers, myself, and Al Clark left the firm of Hess and Lim. Mr. Towers at that time I think had a working relationship with the Commission Staff, and I know that we continued that when we formed the CRC. And I've worked for the Staff on many cases over the years. I've racked my brain trying to remember when it was I was here last, but it was in the past century. Q. All right. We'll go with that.

- 1 from Oregon State University. About the time I finished
- 2 my master's degree -- in 1975 I went to work for the
- Arkansas Public Service Commission. And there is where I
- 4 was first introduced to the subject of rate of return,
- 5 cost of capital.
- 6 The Public Service Commission there sent me to the
- 7 University of Toronto where I had the opportunity to
- 8 study under Myron Gordon, who is an often accredited
- 9 father of the so-called Gordon model. And I worked also
- 10 for the Iowa State Commerce Commission.
- 11 Since the early 80s I've been doing consulting work
- 12 first with Hess and Lim and then with CRC.
- **13 Q.** I would direct your attention to Staff Exhibit 5 on
- 14 the table there.
- 15 A. Yes.
- **16 Q.** Is that your prefiled testimony and exhibits?
- 17 A. Yes, it is.
- **18 Q.** Are you familiar with the contents of your prefiled
- 19 testimony and exhibits?
- 20 A. Yes.
- 21 Q. At the time your testimony and exhibits were filed
- 22 was it true and correct to the best of your information
- 23 and knowledge?
- 24 A. Yes.

- **25 Q.** Do you have any corrections to Staff Exhibit 5?
- 70
- A. On Exhibit 5 I have one correction. Well, three
- 2 corrections on one page. It would be page 45 of
- 3 Exhibit 5, my original testimony. On lines 1 and 6 I
- 4 refer there to Schedule 5. Those references should be to
- 5 Schedule 4. So twice on line 1 and one on line 6,
- 6 Schedule 5 should be changed to Schedule 4.
- **7 Q.** Would you please summarize the contents of your
- 8 initial testimony?
- 9 A. The purpose of my initial testimony was to review
- 10 the company's filing on rate of return and cost of
- 11 capital and then to independently assess that myself.
- 12 I took as my starting place Mr. Dane's testimony and
- 13 his sample of comparable companies which I considered
- 14 appropriate for use to determine an appropriate rate of
- 15 return.
- 16 I came up and concluded that the cost of equity
- 17 would be -- a fair rate of return on equity would be in
- 18 the range of 8 and a half to 9 and a half percent. And
- 19 at that time when I filed that testimony using the
- 20 capital structure and cost of debt in that testimony I
- 21 recommended a return -- an overall rate of return of
- 22 7.6 percent. We'll change that a little when we look at
- 23 my -- the next exhibit.
- **24 Q.** And then I would direct your attention to Staff
- 25 Exhibit 6. Do you have that?

- 1 A. Yes, I do.
- **Q.** Is that your prefiled rebuttal testimony and the
- 3 exhibits?
- 4 A. Yes, it is.
- **5 Q.** Are you familiar with the contents of your prefiled
- 6 rebuttal testimony and the exhibits?
- 7 A. Yes
- **8 Q.** At the time your testimony and exhibits were filed
- **9** was it true and correct to the best of your information
- **10** and knowledge?
- 11 A. Yes.
- **12 Q.** Do you have any corrections to Staff Exhibit 6?
- 13 A. I have two. One will appear on page 13, and it's a
- 14 result of the conversation that took place just a while
- 15 ago in Mr. Rislov's questions to Mr. Coyne about that
- 16 page.
- 17 The reference on line 6 and line 8 to a 4.63 growth
- 18 rate is incorrect. It should be 4.93. Now that's
- 19 correctly shown on line 1. I think Mr. Coyne probably
- 20 noted this when he was being asked questions about it,
- 21 that it was incorrect.
- 22 If you make that correction and use the correct
- 23 number, it changes the implied ROE on line 8 to 14.73
- 24 percent. And that appears again on line 10.
- 25 There's one other. One more correction would appear
- J |
 - 1 on Schedule 1, accompanying that rebuttal testimony 2 Exhibit 6. Down at the bottom of the numbers there's a
 - 3 line that says averages for 18 quarters, and there are no
 - 4 numbers appearing after it. There should be two numbers
 - 4 numbers appearing after it. There should be two number
 - 5 appearing after it.
 - 6 The first number should be 3.48, and the second
 - 7 number should be 3.17. Those numbers do appear correctly
 - 8 on page 20 of the testimony where I'm discussing the
 - 9 exhibit.
 - **10** MS. CREMER: And just so everyone can catch up,
 - 11 on Mr. Copeland's rebuttal testimony, which is Staff
 - 12 Exhibit 6, his first attachment or exhibit, it's Schedule
 - 13 1, and that's where those two numbers would go, at the
 - **14** very bottom of that page.
 - **15 Q.** And I will just have you repeat those numbers again,
 - 16 Mr. Copeland.
 - 17 A. Yes.
 - **18 Q.** And tell them which box to put that in.
 - 19 A. Following the line that says averages for
 - 20 18 quarters two numbers should appear. The first number
 - 21 would be 3.48. It would appear under the number 4.48 in
 - 22 the column that is headed way up at top that says Average
 - 23 Risk Premium.
 - And then the next number that should appear is 3.17.
 - 25 That would appear below the number 4.0. And that's in

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- 1 the column that is headed Median Risk Premium.
- 2 Q. Okay. Thank you. Would you please summarize the
- 3 content of your rebuttal testimony.
- 4 A. The purpose of my rebuttal testimony was to simply
- 5 clarify some differences in issues with respect to my
- 6 testimony and Mr. Coyne's on regulatory lag,
- 7 constitutional standards as they relate to ROE.
- 8 I addressed his criticisms of my dividend discount
- 9 model or nonconstant growth model. He said there were
- o model of nonconstant growth model. He said there were
- 10 three flaws in it. And I pointed out I believe those are
- 11 unfounded.
- 12 I discuss again there the question of using the
- 13 growth in GDP in this type of a model, floatation costs,
- 14 the question of CFO and pension fund ROEs as being
- 15 relevant, the kind of ROE determination we're doing here.
- 16 And, finally, capital structure and cost of debt
- 17 where I did accept the company's method of calculating
- 18 the cost of debt but still maintain that the use of a
- 19 13-month average to develop the capital structure was
- 20 inappropriate. And I provided an updated schedule
- 21 reflecting those conclusions.
- **22 Q.** I would refer you to Xcel Exhibit 7, which is Dane's
- 23 direct.

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- 24 A. I have it.
- 25 Q. Okay. If you would turn to page 11, lines 1 through
 - 3, would you please read that question and answer given
- 2 by Mr. Dane.
- 3 A. The question reads "Did you include XEI in your
- 4 analysis?" And the answer reads "No. In order to avoid
- 5 the circular logic that would otherwise occur, I excluded
- 6 XEI from the proxy group."
- 7 Q. Do you know what the XEI, is that Mr. Dane is
- **8** referring to?
- 9 A. That's Mr. Dane's shorthand for Xcel Energy, Inc. --
- 10 what I would refer to in my testimony as Xcel or to use
- 11 the ticker XEL. But we're talking about the consolidated
- 12 and parent company of NSP.
- **13 Q.** And what is that circular logic that Mr. Dane is
- 14 referring to?
- 15 A. Well, if you included Xcel in the sample of
- 16 comparable companies, he's saying that would be circular
- 17 logic. And it will be because those companies are chosen
- 18 in order to be comparable to Xcel.
- 19 So if you were to include them in the group, you'd
- 20 have a circular logic that Mr. Dane is talking about.
- **21 Q.** And do you agree with his statement on that?
- 22 A. Yes, I do.
- **23 Q.** Okay. If an investor decides to buy stock in NSP,
- 24 do they buy shares of NSP or Xcel Energy?
- 25 A. As for stock, they have to buy shares of Xcel.

- **1 Q.** Are you familiar with NSP's various rate riders that
- 2 are described in Mr. Dane's testimony on page 32? And
- 3 that would be that same Exhibit 7 that you have in front
- **4** of you.

- 5 A. Yes.
- **6 Q.** Do these riders reduce regulatory lag and risk?
- 7 A. Yes, they do.
- **8 Q.** And I guess I should be more specific. What are
- **9** those riders that Mr. Dane is referring to?
- 10 A. I think he's referring to the TCR and environmental
- 11 and transmission cost riders. Yes. On page 32, TCR and
- 12 ECR.
- 13 Q. Could you explain to us how those riders reduce
- 14 regulatory lag and risk?
- 15 A. Well, they allow for a more timely adjustment to
- 16 rates to recover the cost of investing in these specific
- 17 types of investments. They enable a company to begin to
- 18 recover the cost of those investments without having to
- 19 submit a full blown rate case.
- **20 Q.** In your experience does a utility company generally
- 21 control when it files a rate case?
- 22 A. Yes.
- 23 Q. And, based on your experience, why would a utility
- 24 not file a rate case every year, for instance?
- 25 A. They would not file a rate case if their earnings
- 74
 - 1 are adequate to support the return that's required so2 that they can raise capital.
 - **3 Q.** And, to your knowledge, is there a legal reason that
 - 4 would prevent NSP from filing a rate case every year?
 - 5 A. No.
 - **6 Q.** Ms. McCarten testified today and also discussed in
 - 7 her direct and rebuttal testimony ROE and the possibility
 - 8 that NSP did not achieve its authorized return in the
 - **9** last few years.
 - **10** Are you familiar with that testimony?
 - 11 A. Yes.
 - **12 Q.** Based on your 37 years of experience, do you believe
 - 13 that in the last few years that utilities comparable to
 - **14** NSP were earning their required rates of return?
 - 15 A. For the most part, since the early '90s, generally
 - 16 that's been the case. They have been earning their
 - 17 required return on equity. And I think that's
 - 18 demonstrated very convincingly, at least since 2000, by
 - 19 the chart in Mr. Coyne's testimony, his surrebuttal
 - 20 testimony, which would be Xcel's Exhibit 9, on page 7
 - 21 which is a chart of market-to-book ratios.
 - 22 It shows that market-to-book ratios have been, for
 - 23 the most part, well above 1 and high enough above 1 that
 - 24 that I think they show that utilities have been earning
 - 25 more than the required rate of return.

- **1 Q.** Mr. Coyne states that you ignore the current
- 2 environment of rising costs and flat sales. What would
- **3** your response to that be?
- 4 A. Well, I haven't ignored it. Although, I haven't
- 5 addressed it as explicitly as he has.
- 6 However, in looking at the sample of companies that
- 7 he proposed, I looked at the financial conditions of
- 8 those companies, how they're reported particularly in
- 9 Value Line. And Value Line will cover those kinds of
- 10 concerns as they relate to investors.
- 11 So implicitly in the process of doing any rate of
- 12 return analysis, those factors to the extent that they
- 13 influence a required rate of return were taken into
- 14 consideration.
- 15 Q. On Mr. Coyne's surrebuttal Exhibit 9, page 3?
- 16 A. Yes.
- 17 Q. And he quotes the South Dakota Supreme Court
- 18 regarding the standards for a fair return. Do you see
- 19 that?

3

10

- 20 A. Yes.
- **21 Q.** Do you disagree with the premise of that quote?
- 22 A. No. It's I think a fairly conventional quote. The
- 23 premise is from the investor or company point of view,
- 24 which is what Mr. Coyne and I are doing. We're trying to
- 25 present the Commission with evidence regarding the
 - investor or company point of view.
- 2 I do disagree that that's the only thing that
 - matters or that the Commission might have to consider in
- 4 setting just and reasonable rates. But that's the
- 5 framework from which we're working when it comes to
- 6 recommending an ROE.
- 7 MS. CREMER: And, Mr. Smith, at this time Staff
- 8 would like to introduce another exhibit, and I will have
- **9** Mr. Thurber hand that out.
 - (Exhibit 7 is marked for identification)
- 11 Q. Mr. Copeland, you have in front of you what's been
- **12** marked for identification purposes as Staff Exhibit 7.
- 13 Did you prepare this document in preparation of this
- 14 matter?
- 15 A. Yes.
- 16 Q. And would you please state the title of Staff
- **17** Exhibit 7?
- 18 A. It says Public Utilities Fortnightly 2001 [sic] ROE
- 19 Survey. And then below that Authorized ROEs Below 10
- 20 Percent.
- **21 Q.** And I believe you said Public Utilities Fortnightly
- **22** 2001.
- 23 A. 2011.
- 24 Q. Okay. Thank you.
- MS. CREMER: At this point I would like to offer

1 Staff Exhibit 7.

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- **2** MR. SMITH: Mr. Johnson.
- **3** MR. JOHNSON: No objections.
- **4** MR. SMITH: Staff Exhibit 7 is admitted.
 - MS. CREMER: Thank you.
- **6 Q.** Would you explain to us what your source of this and
- 7 then what does it depict?
- 8 A. Well, Public Utilities Fortnightly every year has a
- 9 survey of allowed ROEs. It's similar to the figures that
- 10 Mr. Coyne presented in his testimony. I'm not sure that
- 11 the two sources are exactly the same. They don't appear
- 12 to me to be exactly the same.
- 13 But the purpose is to simply point out that in 2011
- 14 actually the survey goes from the third quarter of 2010
- 15 to the third quarter of 2011. So there will be some 2010
- 16 decisions. There were a number of decisions below
- 17 10 percent, even some of them within the range that I
- 18 recommend.
- 19 The point, though, is just to point out that these
- 20 numbers are out there, but I think that Mr. Coyne and I
- 21 would agree that ultimately this case needs to be decided
- 22 by the Commission on the merits.
- 23 And I sometimes describe listings like this or
 - listings like Mr. Coyne's prepared as representing in
- 25 legalese -- they assume facts not in evidence. We don't
 - _____

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- 1 know all of the things that went into the determination
- 2 of these kinds of rates of return.
- 3 Ultimately the commissions have to decide each case
- 4 based upon the evidence before it. So while they may
- 5 give the Commission an idea of the broad range of returns
- 6 that other commissions are allowing, in the end they
- 7 don't really tell the Commission what's the rate of
- $8\,\,$ $\,$ return it should allow in this case. That's going to be
- 9 determined by other evidence.
- **10 Q.** After reading Mr. Coyne's surrebuttal testimony --
- 11 or I should ask you, did you read Mr. Coyne's --
- 12 A. Yes.
- 13 Q. -- surrebuttal testimony? After having read that,
- 14 do you continue to believe that NSP's investors benefit
- **15** from regulatory lag?
- 16 A. I think generally they have benefited. Whether they
- 17 will continue or not, anything's possible in the future.
- 18 But there's nothing in this testimony that changes the
- 19 fact that over a long period of time NSP Xcel has been
- 20 allowed to earn -- has been able to earn a return greater
- 21 than what the market required, and that's indicated by
- 22 market-to-book ratios.
- 23 Q. After reading Mr. Coyne's surrebuttal testimony, do
- 24 you continue to believe that using only EPS growth rates
- **25** in the constant growth DCF model is inappropriate?

- 1 A. It is, under current circumstances. Mr. Coyne
- 2 testified today and he correctly stated that the constant
- growth rate model assumes that earnings, dividends, and
- 4 book value all grow at the same rate of growth.

5 Now that also assumes or it requires that a

- 6 company's payout ratio be constant. But even Mr. Coyne
- 7 acknowledged that there's been some trends or changes in
- 8 payout ratios.
- 9 Well, when payout ratios are changing, then the
- 10 constant -- the constant growth DSF model you can no
- 11 longer rely solely upon EPS growth rates. And so he
- 12 hasn't really changed my thinking at all regarding that,
- 13 and I think the circumstances right now are that it will
- overstate the required rate of return because of changes
- 15 that are taking place with respect to payout ratios.
- 16 **Q.** After reading Mr. Coyne's surrebuttal testimony, do
- 17 you continue to believe that effective regulation should
- 18 lead to market-to-book ratios of just over 1 over long
- 19 periods of time?
- 20 A. Yes, I do. Mr. Coyne presented a chart that would
- 21 seem to fly in the face of that. I mean, it shows them
- 22 well above 1 for an extended period of time. I think
- 23 that that actually demonstrates an implicit bias in the
- 24 regulatory process. It's probably an unintended
- 25 consequence in the way Commissions adjudicate rate of
 - return.

- 2 That is, they will often take the lowest number and
- 3 the highest number and come out with something in
- between. But all of those numbers -- if they're
- 5 credible, they represent the investor required rate of
- 6 return.
- 7 And if you want to avoid that implicit bias, you've
- 8 got to go to the bottom end of that range. You just
- 9 can't split the difference.
- 10 Q. When you referred to the chart Mr. Coyne referred
- 11 to, could you tell us what page or what chart you're
- 12 talking about that?
- 13 A. That's on page 7, Exhibit 9.
- 14 Q. Thank you. After reading Mr. Coyne's surrebuttal
- 15 testimony, do you continue to believe that Mr. Coyne
- 16 misunderstood your dividend discount model?
- 17 A. I don't know. He didn't -- he did not say. He
- 18 simply repeated a generic objection, but he didn't
- 19 address in his -- in his earlier testimony he had pointed
- 20 out what he called three flaws to that. I responded,
- 21 addressed that. He didn't address that in his final
- 22 testimony. So I don't know if he was -- exactly what he
- 23 thinks about it.
- 24 Q. After reading Mr. Coyne's surrebuttal testimony, do
- you continue to believe use of a forecasted nominal GDP 25

- 1 growth in the multistage DCF model is inappropriate?
- A. I continue to believe that it's inappropriate for
- public utilities for the reasons I explained in my
- 4 rebuttal testimony.
- 5 It is widely used in nonconstant growth models for
- 6 unregulated companies. But for the reasons I've
- 7 presented in my rebuttal testimony, it's not appropriate
- 8 for utilities to make that assumption.
- 9 **Q.** After reading Mr. Coyne's surrebuttal testimony, do
- 10 you continue to believe that a nominal long-term GDP
- 11 growth rate of 4.93 percent represents an heroic
- 12 assumption?
- A. Represents what? 13
- 14 **Q.** A heroic assumption?
- 15 A. Yes, I do. Actually the correction that I made to
- 16 my testimony earlier where I made the mistake of using
- 4.63, if you corrected the 4.93, I think it's even a more 17
- 18 unreasonable assumption than I thought earlier.
- 19 **Q.** After reading Mr. Coyne's surrebuttal testimony, do
- 20 you continue to believe that realized returns reflected
- 21 in Mr. Coyne's multistage DCF model are unrealistic?
- 22 A. Yes.
- 23 **Q.** And can you tell us why?
- 24 A. Well, they require a rate of return which over a
- 25 long period of time simply isn't sustainable. It's
- 82
- unrealistic for that reason. It couldn't be sustained.
- Q. After reading Mr. Coyne's surrebuttal testimony,
- 3 have you changed your opinion regarding double leverage
- and -- I'll let you answer that.
- 5 A. No. Double leverage has long been a controversial
- 6 issue.
- 7 **Q.** And then you were in the process of explaining why
- 8 you believe that.
- 9 A. But there are times when it is an appropriate
- 10 consideration in rate making and many conclusions and --
- 11 excuse me. Many courts and commissions have concluded
- 12 SO.
- 13 **Q.** After reading Mr. Coyne's surrebuttal testimony, do
- 14 you continue to believe that the ROE in this case should
- 15 be based upon the cost of equity of NSP's parent, Xcel
- 16 Energy?
- 17 A. Yes. That's the market entity that would -- equity
- 18 capital is raised. It's not raised by NSP. It's raised
- 19 by Xcel. So the sample of companies that Mr. Dane put
- 20 together, I interpreted them as a set of companies
- 21 comparable to Xcel because that's where the equity is
- 22 raised.
- 23 **Q.** After reading Mr. Coyne's surrebuttal testimony, do
- 24 you continue to believe that CFO's expectations of broad
- 25 market returns support your estimate of the equity risk

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- 1 premium?
- 2 A. Yes. I think that they continue to be relevant
- 3 considerations in looking at whether or not my
- 4 conclusions are reasonable.
- **5 Q.** After reading Mr. Coyne's surrebuttal testimony, do
- 6 you continue to believe that you correctly interpreted
- 7 the Chicago Board Option's Exchange Volatility Index?
- 8 A. Yes. I didn't misinterpret anything. I put
- 9 together a schedule, and Mr. Coyne was correct that I
- 10 was correct that it's recognized as a measure of market
- 11 risk.
- 12 Where the difference lies is that he chose a
- 13 particular period of time to calculate really almost at
- 14 the lowest point where it was in 2007 and '8 and said,
- 15 see, it's higher now.
- 16 Well, yes, it's higher. But anybody can look at the
- 17 chart that was in my testimony and see that that would be
- 18 the example of what a statistician would call a gee whiz
- 19 graph. You can make the slope of the line be anything
- 20 you want by depending upon where you begin it.
- 21 Well, I think it was inappropriate to begin it where
- 22 he began it. But it doesn't change the fact I didn't
- 23 misinterpret anything. He just wants to interpret the
- 24 chart differently than I did.
- 25 Q. After reading Mr. Coyne's surrebuttal testimony, do
 - you continue to believe that ROEs reflected in pension
- 2 funds are helpful in determining the appropriate ROE in
- 3 this case?
- 4 A. Again, I think they are helpful in deciding whether
- 5 a particular conclusion determined in another way, like
- 6 through the ECF is a reasonable result.
- 7 Q. After reading Mr. Coyne's surrebuttal testimony, do
- $oldsymbol{8}$ you continue to believe floatation costs are negligible?
- 9 A. They're close to negligible. I've come up with a
- 10 specific quantification that is six basis points. Now
- 11 given the broad range that I'm recommending, 8 and a half
- 12 to 9 and a half percent, and recommending the midpoint of
- 13 9 percent, if the Commission were to grant -- or were to
- 14 conclude 9.1, they've covered the floatation cost. 9.2
- 15 they've covered them. I don't think they need to make a
- 16 specific allowance for floatation cost.
- 17 Q. Please summarize why there is such a divergence
- **18** between your ROE of 9 percent and NSP's of 10.65, their
- **19** request for 10.65.
- 20 A. There are two specific reasons. And Mr. Coyne
- 21 called attention correctly to -- it's to the growth rate
- 22 and the DCF model.
- 23 Essentially in round numbers his rate of return, his
- 24 cost of equity estimate, assumes a growth rate of
- 25 6 percent. In round numbers mine assumes a growth rate

- 1 of 4 and a half percent. You've got a difference of
- 2 150 basis points there. That plus the 25 basis points
- 3 that he wants to allow as a specific floatation cost.
- 4 In a nutshell that's the difference. And the
- 5 Commission can really, I think, just focus on the growth
- 6 rate for the most part and floatation costs and resolve
- 7 the evidence before them on those two issues and the rest
- 8 of ROE and ROR will fall into place.
- **9 Q.** Please explain how you differ with NSP on its
- **10** capital structure and why.
- 11 A. The NSP is proposing a capital structure that's
- 12 based -- that uses a 13-month average. And I don't
- 13 consider that appropriate for capital structure.
- 14 It is appropriate to use a 13-month average in other
- 15 aspects of regulation. But in capital structure, we're
- 16 using the capital structure as weights to weight capital
- 17 costs. And capital costs are a strictly forward looking
- 18 concept.
- 19 And we're not going to try to -- we're not here
- 20 trying to determine what was the average cost of capital
- 21 during the test year. We're trying to determine based on
- 22 the best and most current evidence we can come up with
- 23 what's the cost of capital, set rates going forward.
- Well, in that context, the use of a 13-month average
- 25 is inappropriate.
- 1 Q. Does the matching principle apply to the capital
 - **2** structure in base rates?
 - 3 A. No, it doesn't. Again, for just that reason. We're
 - 4 not trying to average the cost of capital for the test
 - 5 year.

- **6 Q.** And I misspoke. It should have -- does it apply to
- 7 the capital structure in rate base? Thank you.
- 8 A. Well, yes. You're welcome.
- **9 Q.** Does the concept of known and measurable adjustments
- **10** apply to the capital structure?
- 11 A. Yes.
- **12 Q.** Based on your education and experience, do you have
- 13 a recommendation for the Commission?
- 14 A. Yes. I recommend that the Commission allow a ROE of
- 15 in the range of 8 and a half to 9 and a half percent.
- 16 I've recommended specifically 9 percent. I think that
- 17 would be a fair and reasonable return to the investor
- 18 under current market conditions.
- 19 And then I've recommended a capital structure that's
- 20 shown on -- the updated version is Schedule 3 of Staff
- 21 Exhibit 6. No. Excuse me. That's my debt cost
- 22 calculation. The capital structure is Schedule 2,
- 23 Exhibit 6, where as updated the equity ratio is
- 24 53.04 percent. The debt ratio is 46.96 percent. The
- 25 cost of debt is 6.10 percent. And the overall ROE is

- 1 7.63 percent.
- **2 Q.** And based upon your education and experience, is the
- 3 result of your recommendations just and reasonable rates?
- 4 A. They will contribute to just and reasonable rates.
- 5 Just and reasonable rates consider things other than just
- 6 ROE. These are a fair rate of -- this is a fair return
- 7 to the investor. And they meet the investor component of
- 8 just and reasonable rates.
- 9 I was listening to Ms. McCracken [sic] this morning,
- 10 and I guess I thought I -- maybe I misheard her talking
- 11 about the just and reasonable rates. That's the outcome
- 12 of the process. The Commission sets just and reasonable
- 13 rates based on public need and the utility's needs.
- 14 My testimony here only goes to the utility's needs.
- 15 Now it will support a final determination of a just and
- 16 reasonable rate. But there may be other things that the
- 17 Commission would consider beyond just that in determining
- 18 a just and reasonable rate.
- 19 MS. CREMER: Thank you. That ends my direct of
- 20 Mr. Copeland.
- 21 MR. SMITH: Thank you.
- 22 Xcel, cross-examination, or do you need a minute
- 23 to discuss it with your people?
- MR. JOHNSON: If I could have a moment,
- 25 Mr. Smith.

- **1** MR. SMITH: You may.
- **2** MR. JOHNSON: Thank you.
- 3 (Pause)
 - MR. SMITH: Are you ready, Mr. Johnson?
- **5** MR. JOHNSON: I am, Mr. Smith. Thank you.
- 6 <u>CROSS-EXAMINATION</u>
- **7** BY MS. VALLEY:
- **8 Q.** Good afternoon, Mr. Copeland. I am going to be
- **9** asking you a series of questions. When I do so I will
- 10 make specific reference to either your prefiled testimony
- 11 or the discussion that you've had.
- 12 If I ask you a question that doesn't make sense or
- 13 is confusing, please ask me to rephrase it. It's
- 14 important that we be talking about the same topics at the
- 15 same time.
- 16 A. I understand. Thank you.
- 17 Q. Okay. Let's start with one of the topics you've
- 18 discussed with Ms. Cremer, which is your position with
- **19** respect to market-to-book ratios.
- 20 Do you recall that?
- 21 A. Yes, sir.
- **22 Q.** And, as I recall, your statement was to the effect
- 23 that if regulation is doing a good job over the long run,
- **24** market-to-book ratios should approach 1?
- 25 A. Yes.

- **1 Q.** And you had reference to Mr. Coyne's surrebuttal
- 2 testimony on page 7 where there's a chart of
- 3 market-to-book ratios.
- 4 A. Yes.

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- **5 Q.** And as I read that chart, except for a short period
- 6 of time at the time of the 2008 financial crisis, the
- 7 market-to-book ratios have been above 1 to 1?
- 8 A. Yes.
- **9 Q.** That would infer, would it not, that the entire
- 10 regulatory community in the United States is doing a bad
- 11 job because this reflects what the community is doing.
- 12 A. I wouldn't say a bad job. I would say a misinformed
- 13 job. As I said, I think there's an inherent bias in the
- 14 way commissions tend to adjudicate rate of return. And
- 15 you see that bias in this chart.
- 16 These numbers would be lower if commissions
- 17 understood that if you're going to set a rate of return
- 18 that balances consumer and investor interests, you go to
- 19 the low end of what's fair to the investor. You don't
- 20 split the difference for the investor.
 - That builds in an extra bit of rate of return that
- 22 the investor doesn't need. If you've got a range of
- 23 returns that are fair to the investor, then balancing the
- 24 investor and consumers as you go to the low end.
- 25 But commissions don't do that. They tend to
- 90
 - 1 separate rate of return and consider in the concept of

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- 2 balancing that they have that they're going to sort of
- 3 split the difference on all the rate of returns that they
- 4 get. I think it's an inherent bias in the regulatory
- 5 process.

- **6 Q.** So your belief is that the majority, if not all,
- 7 commissions are misinformed and they're not really
- **8** fulfilling the job they should do?
- **9** MS. CREMER: I am going to object on two
- **10** grounds. One, it's argumentative. And, two, he has
- **11** already stated and answered the question previously.
- MR. JOHNSON: May I respond?
- MR. SMITH: I'm going to just overrule the
- **14** objection and let him answer. It's a little bit
- **15** duplicative, but fire away.
- **16** MR. JOHNSON: Thank you.
- 17 Q. Mr. Copeland, am I correct then -- and you corrected
- 18 me as to how I characterized what the commissions were
- **19** doing and you said in fact they were misinformed. At
- 20 least that's I recall you having said.
- 21 A. Misinformed. Ill informed. Yes. I think that
- 22 they -- they don't understand the effect of how they are
- 23 looking at rate of return. And they are frequently
- 24 looking at rate of return in a way that biases the result
- 25 in favor of the investor.

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- **1 Q.** That would suggest that your point of view is
- 2 different than the majority, if not all regulatory
- 3 commissions: is that correct?
- **4** THE WITNESS: I'm not sure that they considered
- **5** what I'm saying here today. So how can you know that
- 6 it's different than -- or that it's different if they
- 7 have not heard me say what I've said today.
- 8 Q. The results are, however, results you do not approve
- **9** of.
- 10 A. I say the results are evidence of something that I
- 11 see is a bias in the regulatory process.
- **12 Q.** Mr. Smith -- excuse me. Mr. Coyne -- Copeland.
- 13 I'll get there yet.
- 14 Mr. Copeland, if I'm an investor and I have a
- 15 choice between an investment in a utility that's earning
- **16** 10.4 percent or authorized to earn 10.4 and a utility
- 17 that's authorized to earn 9.0 and I hold all other risk
- 18 factors constant, wouldn't I as an investor choose the
- **19** 10.4 return?
- 20 A. You don't have that choice.
- **21 Q.** Really?

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- 22 A. No, you don't.
- 23 Q. How is that, sir?
- 24 A. You don't have that choice. Because in the
- 25 marketplace the investor -- the cost of equity is a
 - marginal return. The investor gets the return that the market requires.
- 3 Now if a company's earning 10.4 percent, one
- 4 company, and another one's earning 9 percent, what
- 5 happens is that the market has already driven the
- 6 market-to-book ratio up for the company that's earning
- 7 10.4 percent.
- 8 You as an investor now you pay more for that stock,
- 9 and so you end up only earning 9 percent. You can't
- 10 outsmart the market. If the market says the required
- 11 return is 9 percent, that's the return that the marginal
- 12 investor is going to get no matter what a company earns.
- **13 Q.** Mr. Copeland, I perhaps misphrased the question.
- 14 Let's assume I'm an investor and I have an opportunity to
- 15 invest in one utility that's authorized, authorized, to
- 16 earn 10.4, and I have an opportunity to invest in a
- 17 utility that's authorized to earn 9.0.
- 18 Is there any question that the investor is going to
- **19** choose the 10.4 authorized return if all other factors
- **20** are the same?
- 21 A. If all other factors are the same, that will have
- 22 already driven the price up so that the investor's only
- $23\,$ $\,$ going to earn the market required rate of return. The
- 24 market sorts out those kinds of things. It's equivalent
- 25 to what economists call the efficient markets theory.

- **1 Q.** Mr. Copeland, are you suggesting that investors are
- 2 indifferent to authorized rates of return; they just
- 3 assume that the market has sorted out the prices and they
- 4 don't care?

- 5 A. No. I'm not saying they don't care. But I'm saying
- 6 it's not a simple process the way you set forth the
- 7 scenario that obviously they're going to choose the one
- 8 for 10.4 and not the one for 9. They may or they may
- 9 not.
- 10 They're going to look at a lot of factors, but the
- 11 point is that just because the allowed rate of return is
- 12 higher or even the earned rate of return is higher that
- 13 doesn't mean they're going to earn more because they have
- 14 to buy it at the market's price and those things may
- 15 already been factored into the market price. They'll
- an cady been factored into the market price. They in
- 16 look at that and see now if they think they've got some
- 17 insider information maybe they'll -- or they think
- 18 they're -- you know, you just can't beat the market that
- 19 way.
- **20 Q.** You're suggesting that investors who look at
- 21 authorized ROEs have insider information?
- 22 A. No, I'm not.
- 23 Q. Good. Mr. Copeland, I'd like to direct your
- 24 attention to Staff Exhibit 7. That was the one-pager
- 25 that was just --
- 1 A. Yes. Go ahead.
 - **2 Q.** Do you have that in front of you?
 - 3 A. I have -- yes. I have this right here, yes.
 - **4 Q.** Thank you. Which of these companies are integrated
 - **5** electric utilities? Do you know?
 - 6 A. I probably would require a clarification on what's
 - 7 meant by "integrated." We have a number of combined
 - 8 utilities; Oklahoma Gas & Electric, Baltimore Gas &
 - 9 Electric. We have some companies here that are parts of
 - 10 larger, integrated I guess maybe what used to be called
 - 11 consolidated utilities. Orange & Rockland Utilities and
 - 12 Niagara Mohawk are both parts of another -- Consolidated
 - 13 Edison.
 - **14 Q.** Buy integrated utility I mean an electric utility
 - **15** that has generation transmission and distribution
 - 16 assets.
 - 17 A. Okay. Thank you for that clarification.
 - 18 No. I don't know specifically the levels of, say,
 - 19 generation and transmission in every one of these
 - 20 companies. I think most of them would have -- would be
 - 21 integrated to some extent.
 - **22 Q.** Mr. Copeland, I'd like to direct your attention to
 - 23 the Fitchburg Gas & Electric Decision, which is
 - 24 reflecting a ROE of 9.2 percent.
 - **25** Do you see that?

- 1 A. Yes.
- 2 Q. It's correct, is it not, that this is a pure
- distribution company?
- Α. It may be. I'll take your word for that, subject to
- 5 check.
- 6 **Q.** And it's correct also, is it not, that this company
- had a comprehensive revenue decoupling proposal approved
- 8 in connection with this decision?
- 9 A. I don't know. I'll accept your representation of
- 10 that.
- 11 **Q.** With respect to Western Massachusetts Electric, the
- 12 next one down, that's the T & D company, no generation
- 13 assets; is that correct?
- 14 A. Subject to check, yes.
- 15 **Q.** And they also have a comprehensive revenue
- 16 decoupling approval?
- 17 A. Yes.
- 18 **Q.** With respect to the next one down, New Hampshire
- 19 Unitil Energy Systems. Excuse me. Bear with me for a
- 20 moment, please.
- 21 A. What? I'm sorry.
- 22 Q. Unitil Energy Systems.
- 23 A. Yes.
- 24 **Q.** It's my understanding that also is a distribution
- 25 company, pure distribution.

 - A. I'll accept that subject to check. Q. Do you have any reason to doubt that?
- 3 Α. No, I don't.
- With respect to Niagara Mohawk Power, the next one
- 5 down

- 6 A. Yes.
- 7 **Q.** That also is a pure distribution company?
- 8 A. I'll accept that, subject to check.
- 9 Q. And, similarly, Orange & Rockland?
- 10 A. Yes.
- 11 Q. I guess Orange & Rockland is a transmission and
- 12 distribution company. Is that consistent with your
- 13 understanding?
- 14 A. I'll accept that, subject to check.
- 15 **Q.** The ownership of generation assets has risk, does it
- 16 not, to a utility, environmental compliance, costly
- 17 upgrades, what have you?
- 18 In general that's the perception, yes.
- 19 Mr. Copeland, you indicated you had been doing
- 20 business with this Commission for quite a number of
- 21 years, and I believe you characterized your last
- 22 appearance here as in the last century.
- 23 Do you recall that?
- 24 Yes. Α.
- 25 Q. So that would be pre-2000?

- 2 When was the last time one of your recommendations
- 3 before this Commission was resolved through a contested
- case process?
- 5 A. Again, it would have been -- I mean, I'm not sure.
- I'd have to go back and see. It was a long time ago.
- Do you have a strong sense it was before the year
- 8 2000?
- 9 A. Oh, yes.
- 10 Q. If you can recall, approximately how many ROE
- 11 recommendations have you made in the last five years?
- 12 A. I've been doing about three or four a year. I'm
- 13 semiretired. I've been three or four a year for the past
- 14 several years.
- 15 Q. Do you recall any recommendation in the past four or
- 16 five years where you recommended a range that was above
- 17 9.5?
- 18 A. Where my recommendation was above 9.5?
- 19 **Q.** Where the range that you proposed. In this case
- 20 you've proposed 8.5 to 9.5. And I'm now focusing on that
- 21 range.

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- 22 A. I don't recall. For a little while my
- 23 recommendations were somewhat lower, and then they had

- 24 come back up. But I'm not -- I'd have to go back and
- 25 research it. I don't recall any.
- **Q.** So if I'm understanding your answer correctly, your
 - answer is that you may have recommended lower ranges at
 - 3 some point, but you don't remember any time where you've
 - made a recommendation based on a range that had a top
 - 5 over 9.5?
 - 6 MS. CREMER: If I could just clarify, when you
 - 7 talk about recommend, do you mean in a contested case
 - 8 hearing or like when he -- when we hire him as a
 - 9 consultant he gives us a recommendation?
 - 10 Are you talking about that or contested case
 - 11 public record?
 - 12 MR. JOHNSON: I will clarify.
 - 13 MS. CREMER: Okay. Thank you.
 - 14 Q. Mr. Copeland, focusing now on situations where
 - 15 you've submitted prefiled testimony or other
 - 16 recommendations in a rate setting capacity, it's my
 - 17 understanding from your answer, your prior answer, that
 - 18 you may have recommended lower ranges at some time, but
 - 19 you don't remember any that are over 9.5 in the last
 - 20 number of years?
 - 21 A. No. I don't remember. That's not to say there
 - 22 might not have been one or two. But generally my
 - 23 recommendations have all been in the single digit range
 - 24 for several years now.
 - 25 Q. And close to 9 percent in the majority of cases; is

101 103 1 1 that not correct? And by that I mean your recommended MR. SMITH: Other Commissioner questions, 2 2 ROE. advisor questions? A. Yes. Close to 9. Yes. 3 3 Mr. Rislov. 4 4 MR. JOHNSON: I do not have any other questions. MR. RISLOV: Mr. Copeland, I know you were in 5 Thank you, Mr. Copeland. 5 the room when I was asking Mr. Coyne a couple of 6 6 MR. SMITH: Staff, do you need some time, or are questions, and I was going to ask you the same questions. 7 7 you ready? Just for your memory a bit, we talked a little 8 Well, wait a minute. We've got to go to 8 bit about the transition period on the DDM. And I 9 9 Commissioner questions. My apologies. wanted to get your impression of how long that should be 10 10 Chairman Nelson. and --11 11 CHAIRMAN NELSON: You heard my discussion with THE WITNESS: I don't think it's a critical 12 Mr. Coyne regarding my questioning in whether there was a 12 issue. If you look at Staff exhibit -- it would be my 13 possibility of quantifying the difficulty of raising 13 original testimony so Staff Exhibit 5. Schedule 5, which is the summary sheet for my dividend discounted on cash 14 capital based on where the ROE was at. And he indicated 14 15 15 that's just something that's impossible to calculate. flow analysis where the transition period is relevant. 16 16 Would you concur with his conclusion? You'll see I used a transition period of 17 A. I'm not as pessimistic. We can, for instance, see 17 15 years, from 2015 to 2030. The first period is 18 the difference in the cost of debt between A rated 18 determined by industry practice, the five years. That's 19 19 companies, B rated companies, you know, double A and so generally the industry practice for forecasting into the 20 20 forth. future. Earnings per share, dividends per share. 21 21 It's not as easy with ROE, but I think that one can Generally out about five years. 22 22 look at ROEs and market-to-book ratios and can come up You want to go out probably at least another 23 with a fairly accurate assessment of at what point would 23 10 years, 15 years maybe. At that point you're so far 24 the ROE be so low that it's going to drive the market 24 out into the future that by the time you start 25 25 price below book value. And at that point the utility's discounting these numbers back to the present, when 102 104 1 going to have trouble raising capital. 1 you're at 12 years or 17 years isn't going to -- isn't 2 But as long as you keep it above 1, a little bit going to matter much. I think 15 that I used is a -- is 3 3 above 1 to cover under pricing floatation costs, say 1.1, a reasonable result for the transition period. 4 they'll raise capital. And you can determine the level 4 MR. RISLOV: If I recall, Mr. Coyne, I believe, 5 of ROE necessary to support that kind of market-to-book 5 looked at a five-year period from after the fifth year to 6 ratio. That would be the way I would approach it. 6 the tenth year as -- and I don't want to misstate his 7 7 It's slightly different than the question you're testimony, but I recall that was at the point after 8 8 asking, but I think it still gets to the fact that you 10 years where he felt maybe material wasn't there to 9 can quantify. You can quantify the point at which a rate 9 make, I guess, an accurate -- I'll use my own words, an 10 10 of return is so low that a utility's not going to be able accurate estimate going beyond that point for transition 11 11 to raise capital. period. 12 12 THE WITNESS: I don't remember his exact And I would say that's -- if you go as low as 13 13 8 percent, you're going to run into problems. But I'm assumptions about the transition period. If he used just 14 not recommending a return that low. 14 five years, that may be a bit short. I'm not -- but he 15 CHAIRMAN NELSON: I understand. So if you're 15 claims that -- you know, I mean, he did replicate my 16 saying if you're in a ratio range of 1.1, you said 16 result -- I mean, not my result, but he used my model and 17 17 they'll be able to raise capital. Sufficient capital or came up with just a little over 10 percent with his 18 18 just raise capital? There's a big difference. assumptions. 19 THE WITNESS: There will be a big difference 19 I don't think that the results are as sensitive 20 maybe on the debt side when you're cutting it that close, 20 to the transition period as they are to the inputs, the but I don't think with equity. As long as it's enough 21 21 growth rate in the first five years. That's going to be

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the most important factor. That's going to be the one

mine are probably due to what's happening in those first

So any differences between his conclusions and

that -- the assumption that's weighted most heavily.

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above book value to cover underpricing and floatation

costs, I don't think it's going to impact the efficiency

CHAIRMAN NELSON: Thank you.

of raising equity capital.

1 five years.

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MR. RISLOV: If we could go to your rebuttal testimony on page 13. And, again, I discuss this a bit with Mr. Coyne. Looking at line 4 through line 8.

5 THE WITNESS: What page?

6 MR. RISLOV: 13.

7 THE WITNESS: 13. I'm there. What was the 8 question?

MR. RISLOV: Specifically I asked Mr. Coyne about the analysis you had done, your concerned payout ratio and growth rate. And I know you've corrected that growth rate now to 4.93.

13 THE WITNESS: Yes.

> MR. RISLOV: On line 6 instead of 4.63. I guess my question was I wanted you -- if you were aware of what Mr. Coyne's answer was, I wanted you to respond to the answer he had given me.

THE WITNESS: Well, I think that the real gist of his answer was that this wasn't -- that wasn't what he did.

But to clarify, this 4.93 percent is the rate of return -- the terminal rate of return in his nonconstant growth model. The only difference between constant growth and nonconstant growth is nonconstant growth you assume that -- it changes for a while, but at some point

you've got to say you're assuming the growth rate into perpetuity, into perpetuity at some point. Whether it's a nonconstant growth or the regular DCF. At some point you assume a growth rate into perpetuity.

Well, the one he assumed -- or the one that's in his model reflected on Schedule 7 of his rebuttal testimony, it's 4.93 percent. All I'm doing is pointing out that given a realistic assumption about payout ratios, that that's equivalent, corrected, to an ROE of 14.73 percent.

And my point simply was that an ROE of 14.73 percent would produce unheard of returns if carried into perpetuity. It's not a realistic assumption.

MR. RISLOV: Mr. Coyne has listed here on your exhibit -- or you've listed implying Mr. Coyne used a payout ratio of .6655, roughly two-thirds.

THE WITNESS: Yes.

18 MR. RISLOV: And yours was .61. And I've read 19 both your testimony. But it seems to me that there's a 20 fundamental disagreement over how that retention ratio 21 should be viewed in the current period. 22

And I know you commented on it, but I would like you to explain the number you've used perhaps in a little more detail than what I've read within your testimony.

25 THE WITNESS: Yes. If you look back at my

1 Schedule 5 -- and this is Staff's Exhibit 5. Payout 2 ratio -- the payout ratio is the reverse of retention 3 ratio. This schedule shows retention ratios. You'll see it says there in the column under 2030 it says .39 so 4 that's the -- excuse me .61 that we're talking about.

6 Actually all I'm assuming is that over the next five years there's -- each utility will have its own 8 growth rate. But after that their growth -- their payout 9 ratio will over a 15-year period will become equal to the 10 industry average.

As I pointed out in my testimony, this is a common statistical result is called reversion to the mean. A company that has a very high payout ratio, you can put money on the fact it's probably going to come down. A company's got a very low one, it's going to go up. There's always this tendency over time for things to revert to the mean.

That's what I built into this analysis is that beginning the year 2015 if a utility's payout ratio is -was below the industry average of 61 percent, over time that will get up to 61 percent. If it is above that, it will go down.

23 Now these are Value Line's projections out five 24 years from now. I think Mr. Coyne's approach was to go 25 back and use a historical average back to 1990. But the

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1 whole reason why I'm saying we can't use just EPS alone is because utilities have been adapting their dividend

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3 policies to reflect the fact that they face a riskier,

more competitive marketplace.

5 You know, utilities used to be stocks for widows and orphans. You know, they were real safe. They paid a 6 very stable and secure dividend. That's not the case 8 anymore. Utilities are a little riskier than they used to be.

10 What utilities have done to accommodate that is 11 that, well, they've lowered their payout ratios. You 12 can't go back to 1990 and say the payout ratio back then 13 is what it should be now because utilities now are facing 14 different risks.

15 So, you know, I took Value Line's estimate for 16 the next five years to be a reasonable number to base 17 this analysis upon.

MR. RISLOV: Thank you.

19 MR. SMITH: Any other Commissioner questions? 20

Commissioner Hanson.

21 COMMISSIONER HANSON: Thank you. Sir, do you

22 have any comments to make on historic test year, 23 regulatory lag? You've heard the discussion earlier. Do

24 you have any problems with that? Should that concern

25 us?

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THE WITNESS: Regulatory lag, should it concern

you?

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COMMISSIONER HANSON: Well, the historic test year and how that reflects on risk and why we should have a higher --

THE WITNESS: Well, it should concern you, but based on what I know about South Dakota regulation, I think you're doing the right things. If circumstances are such that utilities have massive capital expansion programs, they may have to come in more often for rate increases.

The phase in legislation that's been approved will help address regulatory lag. It almost seems to me that there's -- there's a legislative and a Commission awareness of what you've got to do to be addressing these kind of issues. And so it seems to me that's taking place.

What I don't think you should do is make ad hoc adjustments to ROE. If there's a problem with regulatory lag, identify where the problem is and come up with a specific approach to identify the problem.

ROEs should be determined based on the best evidence of what the investors require and just shouldn't be a way to back into a rate of return that would achieve some other objective.

COMMISSIONER HANSON: In one of Xcel's documents

they discuss their weighted cost of debt. And it's their down and dirty or back of the envelope way to look at something of that nature and assess their weighted cost of debt and how many basis points above that that they would need in order to attract investment?

THE WITNESS: Well, as far as weighted -- the weighted cost of debt is a way of compensating the company for the debt that they have now.

Actually, the market cost of debt may be below or above the weighted cost of debt. You don't want to set the cost of debt for rate making purposes based on the market cost of debt.

What would happen then is at times either the -you would just be enriching the equity owner or you'd be depriving the equity owner. Because what happens is if the market cost of debt is below the imbedded cost of debt, then the shortfall comes out in rate of return on equity. And if it's above it just goes to the equity on

So I think that the way we do the imbedded cost of debt now is correct. There was an issue about the way the company did it in this case that there was nuance to it that I missed the first time around. But Mr. Coyne's testimony convinced me that the method was consistent,

1 and I acknowledged that in my recommendations in this 2 case. But I don't know that there's anything more that 3 needs to be done to the imbedded cost of debt for now.

COMMISSIONER HANSON: So would it be your

5 opinion that we should ignore their weighted cost of debt 6 as much as we might ignore the argument that the total company's rate of return on equity is low at the present 8 time and that if Nobles is not considered at a higher 9 ROE, then it won't bring up the other -- the total 10 company ROE?

11 THE WITNESS: Well --

COMMISSIONER HANSON: It's pretty obvious the 13 fallacy of that argument is that, gee, our ROE is low, therefore, we need a higher ROE on the Nobles because then it brings up the total ROE and if you don't give us a higher ROE on Nobles, then it's not going to bring everything up.

THE WITNESS: Again, I think that's an example of looking at these things in an ad hoc fashion. We should try to determine the principles that should govern the appropriate cost of debt or the appropriate ROE if in the case of Nobles -- I'm not an expert on the issues there, but whether Nobles or anything else if there's some disallowance, no, that doesn't mean that you then

25 try to offset that through the ROE. That would be 110

1 self-defeating.

> 2 Each issue needs to be looked at in isolation 3 based on the appropriate regulatory and rate making 4 principles for that issue. And I think things will fall 5 out the way they should if you do it that way.

considerations that you haven't had an opportunity to address here in regards to the fact that the Coyne chart showing that your recommendations or Staff's recommendations are -- I guess you're Staff in this particular situation, that your recommendations are lower than everyone else's final ROE?

COMMISSIONER HANSON: Are there other

13 Is there anything else that you wanted to cover 14 on that?

THE WITNESS: I would just repeat what I said in response to company counsel's questioning about market-to-book ratios. I think those higher ROEs that are in that schedule, they're supporting a higher market-to-book ratio than investors require. And I'm just -- I'm just not sure that commissions are well-aware

of that fact. And, thus, there's a sense in which 21 22 there's this built-in bias to regulation that favors the

23 investor.

24 You know, I don't think that there's anything I 25 need to add to my testimony. I think the rate of return

113 115 1 1 that I've come up with is a range, 8 and a half to 9 and the --2 a half percent, will do everything that I said it will MR. SMITH: I'm assuming we have a constant do. I think it's fair to the investor. It's a 3 here -- we have a fixed capital need that we're talking 4 reasonable estimate of the return required to attract about. And we can raise it either -- you know, it could 4 5 capital. And it's fair to the investor. be raised at --6 6 The fact that commissions have allowed higher You know, I've been an investor in some small 7 returns doesn't make this one not fair to the cap companies, and you basically have a huge dilution 8 investor. 8 every time they have a need for a capital raise, even 9 9 COMMISSIONER HANSON: Are there other though they're highly risky companies, et cetera. 10 considerations that we should give to the different RTO 10 So at least in that sense you have that impact 11 11 markets? The differences between a CAL RTO or a MISO or that's a very positive investor impact, do you not? 12 PGM or capacity markets versus energy markets or anything 12 THE WITNESS: But if the market-to-book ratio 13 13 like that? stays enough above 1 to cover floatation cost, you don't 14 THE WITNESS: I don't know. I have not looked 14 get dilution. In fact, what happens, if it's well 15 at that. I wouldn't think that it would materially 15 above 1, you get accretion. You actually -- existing 16 16 affect my recommendation in this case. shareholders, they get a benefit. You don't get 17 100 basis points is a very broad range. I mean, 17 dilution. 18 18 I basically intentionally built in a lot of variation You get dilution when it's below 1. You get 19 there for a lot of different things that might impact the 19 accretion if it's above 1. And if it's close to 1 but 20 20 enough to cover the cost of issuances, you won't have appropriate rate of return. 21 21 But in my experience when you look at these dilution. 22 22 things -- and I don't have specifics on examples that MR. SMITH: Thank you. Staff. 23 you're citing, but if you could quantify them, you're 23 MS. CREMER: Staff has nothing further. Thank 24 probably talking about something that might add a quarter 24 you.

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25 of a basis point. Or you can reduce the rate of return

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follow up to the Commissioner questions? 2 MR. JOHNSON: Mr. Smith, may I again have a 3 moment?

MR. SMITH: Does Xcel have any questions in

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4 MR. SMITH: Yes.

5 MR. JOHNSON: Thank you. 6

(Pause)

7 MR. JOHNSON: Mr. Smith.

8 MR. SMITH: Mr. Johnson.

9 MR. JOHNSON: Thank you.

10 **RECROSS-EXAMINATION**

11 BY MR. JOHNSON:

12 Q. One small area, Mr. Copeland. Just a few moments

13 ago you had a conversation with Mr. Smith regarding the

14 effect on existing investors. And as I recall, you

15 indicated that as long as the issuance price is above

16 book, there is no dilution. At least that's how I took

17 your answer.

18 A. That's what I said.

19 **Q.** Isn't it correct that investors think of dilution in

terms of the stock value or the stock price they've got rather than book value? Aren't they more interested in

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what effect it has on their investment, which is measured 22

23 by price?

24 MS. CREMER: Well, I'm going to object because 25 he's asking what investors -- I can't remember how you

by a quarter of a basis point if you, you know, use some

kind of tracking mechanism to ROE or something. It's

3 still going to fall in within this broad range that I've

4 recommended.

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5 COMMISSIONER HANSON: All right. Thank you. 6 MR. SMITH: Any other Commissioner questions?

7 If not, I have one question, if I might. And

8 just following up on Mr. Johnson's question, the one

9 about the relationship between ROE and the ability to

10 raise capital. And then your response was it doesn't

11 have that significant of an impact because of the effect

12 on market to book ratio. And I don't know if you recall 13 that.

14 THE WITNESS: Well, I have a general 15 recollection of the discussion. You have a question

16 about that?

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MR. SMITH: I did. I did have one. And it was

18 just the thought that at least in terms of a positive

19 impact on ability to raise capital, though, that

20 increased ROE has the effect, does it not, of enabling

21 the raising of capital with much less of a dilutive

22 effect to other equity investors and, therefore, reducing

23 the -- or increasing the overall perception of the

24 investing community of the quality of the investment? 25 THE WITNESS: Well, you only have dilution if

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1	put it but what do investors think or what do they look	1	A. I see it. Thank you.
2	at and then you asked a compound question so I think at a	2	Q. For perspective and clarification, Mr. Coyne, can
3	minimum you need to split them.	3	you tell me what the result of your multistage DCF
4	MR. SMITH: I'll sustain the second part but	4	analysis was and your ROE it may support?
5	overrule the first.	5	A. The multistage analysis that I did, excluding
6	MR. JOHNSON: Thank you.	6	floatation cost, average 10 percent. With floatation
7	Q. Mr. Copeland, as I understood your question and your	7	cost between 14 and 25 basis points, it would have been
8	answer, and I think we've established your comment was	8	10.14 to 10.25.
9	phrased in terms of dilution in relation to book value.	9	Q. Mr. Coyne, was your ROE recommendation in this case
10	A. That's correct.	10	affected or intended to fix a problem, or was it based
11	Q. Is it not correct that investors think of dilution	11	upon the ROEs of other comparable companies?
12	in terms of the effect of their stock value rather than	12	A. It was the latter. It was designed to be an
13	book value?	13	independent analysis of a market-based rate of return for
14	A. I'm not sure that's correct.	14	NSP South Dakota, not designed in any way to fix a
15		15	problem.
	MR. JOHNSON: I have no other questions. Thank		•
16	you.	16	Q. Was your ROE recommendation affected by the fact
17	MR. SMITH: Staff, follow on.	17	that NSP uses a historic test year in South Dakota?
18	MS. CREMER: Staff has nothing. Thank you.	18	A. My analysis was not impacted by that fact.
19	MR. SMITH: Thank you. I think you may step	19	Q. With respect to the topic of market-to-book ratios,
20	down, Mr. Copeland.	20	are you aware of any regulatory Commission in the country
21	At this point, Staff, do you have anything	21	that regulates with a few towards maintaining a 1-to-1
22	further at this point?	22	market-to-book ratio?
23	MS. CREMER: Not on this issue. Thank you.	23	A. No, I'm not. Nor the U.S. nor Canada.
24	MR. SMITH: Would you like a quick break before	24	MR. JOHNSON: Thank you. No other questions.
25	we go to your rebuttal?	25	MR. SMITH: Staff.
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1	MR. JOHNSON: Oh, yes. That would be helpful.	1	MS. CREMER: Thank you. We have no questions.
2	Thank you.	2	MR. SMITH: Commissioners, advisors?
3	MR. SMITH: Right now it's about 12 after.	3	Seeing nothing, I think you may step down.
4	Should we go to 25 after? What do you think? 25 after?	4	THE WITNESS: Thank you, sir.
5	That's about a 13, 14-minute break. How is that?	5	MR. SMITH: Mr. Coyne.
6	MR. JOHNSON: Okay.	6	Well, I think that concludes testimony, does it
7	(A short recess is taken)	7	not, on rate of return?
8	MR. SMITH: We'll reconvene the hearing in	8	MR. JOHNSON: It does, Mr. Smith.
9	EL11-019.	9	MR. SMITH: And the related set of issues.
10	Xcel, it's rebuttal time.	10	With that, rather than embark on the Nobles
11	MR. JOHNSON: Thank you, Mr. Smith. We would	11	issue now, should we adjourn for the day, go into recess,
12	like to call Jim Coyne as a rebuttal witness.	12	and begin in the morning, or Staff.
		13	MS. CREMER: That would work for Staff. The
13	MR. SMITH: Please proceed.		
14	MR. SMITH: Please proceed. MR. JOHNSON: Thank you.	14	other issue that we might want to discuss is how long
14 15	·	14 15	other issue that we might want to discuss is how long they believe Nobles will take that would be Mr. Soye's
14	MR. JOHNSON: Thank you.		
14 15	MR. JOHNSON: Thank you. MR. SMITH: You're still under oath, Mr. Coyne.	15	they believe Nobles will take that would be Mr. Soye's
14 15 16 17 18	MR. JOHNSON: Thank you. MR. SMITH: You're still under oath, Mr. Coyne. <u>DIRECT EXAMINATION</u>	15 16	they believe Nobles will take that would be Mr. Soye's issue, not mine simply because we're scheduled to
14 15 16 17	MR. JOHNSON: Thank you. MR. SMITH: You're still under oath, Mr. Coyne. DIRECT EXAMINATION BY MS. VALLEY:	15 16 17	they believe Nobles will take that would be Mr. Soye's issue, not mine simply because we're scheduled to start at 8 o'clock and go until 2, but I really don't
14 15 16 17 18	MR. JOHNSON: Thank you. MR. SMITH: You're still under oath, Mr. Coyne. DIRECT EXAMINATION BY MS. VALLEY: Q. Mr. Coyne, I'd like to direct your attention to a	15 16 17 18	they believe Nobles will take that would be Mr. Soye's issue, not mine simply because we're scheduled to start at 8 o'clock and go until 2, but I really don't believe that we need to start at 8 o'clock. But I would
14 15 16 17 18 19	MR. JOHNSON: Thank you. MR. SMITH: You're still under oath, Mr. Coyne. DIRECT EXAMINATION BY MS. VALLEY: Q. Mr. Coyne, I'd like to direct your attention to a very few specific topics and ask you for some questions	15 16 17 18 19	they believe Nobles will take that would be Mr. Soye's issue, not mine simply because we're scheduled to start at 8 o'clock and go until 2, but I really don't believe that we need to start at 8 o'clock. But I would leave that to those who are actually going to litigate
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14 15 16 17 18 19 20 21	MR. JOHNSON: Thank you. MR. SMITH: You're still under oath, Mr. Coyne. DIRECT EXAMINATION BY MS. VALLEY: Q. Mr. Coyne, I'd like to direct your attention to a very few specific topics and ask you for some questions that I hope will be clarifying in nature. The first one I'd like to direct your attention to	15 16 17 18 19 20 21	they believe Nobles will take that would be Mr. Soye's issue, not mine simply because we're scheduled to start at 8 o'clock and go until 2, but I really don't believe that we need to start at 8 o'clock. But I would leave that to those who are actually going to litigate this issue. MR. SMITH: I will look to Mr. Soye and is
14 15 16 17 18 19 20 21 22	MR. JOHNSON: Thank you. MR. SMITH: You're still under oath, Mr. Coyne. DIRECT EXAMINATION BY MS. VALLEY: Q. Mr. Coyne, I'd like to direct your attention to a very few specific topics and ask you for some questions that I hope will be clarifying in nature. The first one I'd like to direct your attention to is Mr. Copeland's testimony, his rebuttal testimony, at	15 16 17 18 19 20 21 22	they believe Nobles will take that would be Mr. Soye's issue, not mine simply because we're scheduled to start at 8 o'clock and go until 2, but I really don't believe that we need to start at 8 o'clock. But I would leave that to those who are actually going to litigate this issue. MR. SMITH: I will look to Mr. Soye and is that I'm hearing the Commissioners express a

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1	It's the Trail of Governors Dedication.	1	today?
2	Any other thoughts? Parties.	2	A. I do.
3	Ms. Valley.	3	Q. Mr. Alders, would you care to give an opening
4	MS. VALLEY: Thank you. We're fine starting at	4	statement?
5	8:00 tomorrow. And I agree that it could be resolved	5	A. Thank you.
6	before 1 o'clock.	6	Good morning. In this proceeding I filed testimony
7	MR. SMITH: Okay. Is that the preference of all	7	supporting cost recovery for the Nobles Wind Project.
8	three Commissioners? Or at least the majority?	8	The analysis conducted as part of the selection process
9	With that, we will begin again we will	9	for the Nobles Wind Project indicated it was a prudent
10	reconvene tomorrow as scheduled at 8:00 in the morning,	10	resource. In concert with the rest of our system Nobles
11	same room.	11	will provide customers with economical electricity.
12	(The hearing is in recess at 4:30 p.m.)	12	In this proceeding we conducted we presented
13	(The hearing resumes at 8 o'clock a.m. on June 14, 2012.)	13	three analyses of the Nobles Wind Project. The
14	MR. SMITH: Good morning, everyone. This is	14	strategist modeling that was filed in Minnesota and North
15	John Smith. I'm the Hearing Examiner in Docket EL11-019	15	Dakota was a conservative study. It did not look at
16	in the matter of the application of Northern States Power	16	Nobles as the next wind resource to be added to our
17	Company, d/b/a Xcel Energy for authority to increase its	17	system, but instead it looked at Nobles as if it were the
18	electric rates.	18	last project to be added in compliance with system
19	Following recess yesterday around 4:30, we will	19	requirements for renewable power over the next 25 years.
20	now call the hearing back to order. It's 8 o'clock on	20	That conservative study focused found that Nobles
21	Thursday, June 14.	21	is cost competitive with nonrenewable alternatives over
22	With that, Xcel, we'll turn to you. The issue	22	the life of the project. Both Minnesota and North Dakota
23	this morning is the extent to which Nobles Wind Farm will	23	commissions concluded the analysis was adequate to
24	be included for rate recovery.	24	demonstrate that Nobles is a reasonable and prudent
25	So, with that, Ms. Valley, I'll turn it over to	25	addition to our system.
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1	you, and please proceed.	1	In addition, we conducted a more realistic
2	MS. VALLEY: Good morning Commissioners,	2	cost-benefit analysis of Nobles on a system power supply
3	Mr. Smith. Thank you. I would call Jim Alders to the	3	costs that looked at the incremental effect of the
4	stand this morning.	4	project. As the next unit of wind to be added to our
5	JIM ALDERS,	5	system, Nobles displaced energy from facilities with more
6	called as a witness, being first duly sworn in the above	6	expensive operating costs in the second analysis.
7	cause, testified under oath as follows:	7	Under the incremental approach to the strategist
8	DIRECT EXAMINATION	8	modeling, the benefits of Nobles exceeded the costs by a
9	BY MS. VALLEY:	9	range of anywhere from 4 million to \$80 million depending
10	Q. Mr. Alders, could you please state your name and	10	on the cost assigned to the carbon regulation that may
11	business address for the record.	11	occur in the future.
12	A. James Alders. Xcel Energy at 414 Nicollet Mall in	12	The 4 million in benefits results from using no
13	Minneapolis.	13	accounting or no carbon costs for future regulation,
14	Q. And who is your employer?	14	and the 80 million in net present value of benefits
15	A. Northern States Power Company, Minnesota.	15	occurs when we use \$17 a ton for the potential impact of
16	Q. What is your title?	16	carbon costs in the future.
17	A. Strategy consultant.	17	We included carbon cost in our analysis because
18	Q. And were you here yesterday when we marked and	18	failing to do so could result in a selection of a
19	stipulated the exhibits into the record?	19	resource option that could prove to be more costly in the
20	A. I was.	20	future. Nobles will operate for that 25-year period at
21	Q. Are Xcel Energy Exhibits 3, 4, 5, and 6 the copies	21	least.
22	of your public and confidential prefiled rebuttal and	22	At the time of our evaluation the Nobles project was
23	surrebuttal testimony in this case?	23	made experts were predicting the regulation of carbon was
24	A. Yes.	24	on the horizons. Was on the horizon and the cost would
o-	Q. Do you adopt those exhibits as your sworn testimony	25	likely be in that neighborhood of \$17 per ton.
25		121 to 124	4 of 281 07/02/2012 04:02:51 PM

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1 Nonetheless the incremental analysis or second 2 analysis indicated that regardless of your view of 3 carbon, there is potential benefit associated with the 4 Nobles project as it operates in our system throughout 5 the future.

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Finally, we've also compared Nobles against a forecast price of market energy that was known at the time of our selection. Forecast market prices were over \$3 a megawatt hour more expensive than our costs assumed for the Nobles project at the time.

Staff witness Ms. Kavita Maini has taken the position that 30 percent or \$612,000 of the revenue requirement associated with Nobles investment costs should be disallowed.

However, as the evidence shows in this proceeding, the project was cost-effective. Because Nobles is a cost-effective resource, the cost of the project and the corresponding benefits of Nobles shouldn't remain in our South Dakota rates.

In addition, Ms. Maini advocates disallowing costs if they exceed benefits because of a misperception that Nobles was conducted -- was selected solely because of the Minnesota renewable energy policy.

We approach compliance with renewable energy policies enacted by the states in which we serve on an

aggregate basis. Those combined renewable energy policies may have created motivation to pursue a renewable project but it did not drive our decision-making regardless of the cost-effectiveness of what the market presented us.

In this circumstance we found the opportunity to add a wind resource that will help advance renewable policy while at the same time add generation that keeps customer costs lower than otherwise would be.

If the Commission were to disallow cost recovery because of that disagreement with Minnesota policy, we would seek to recover those costs in Minnesota and the benefits should follow. Our study of the benefits that should be reallocated along with the cost of replacement energy shows that the shift in benefits and costs of replacement energy would exceed the costs associated with Nobles in this proceeding and, therefore, would result in higher costs to South Dakota.

This is essentially a fourth test demonstrating that Nobles is a prudent resource to add to our system.

In addition, although Ms. Maini recommends 22 disallowing the amount of actual construction costs that 23 exceeded our early estimates, that cost estimate was 24 created for use in the Minnesota regulatory proceeding in 25 which the company received approval to recover Nobles'

1 costs through a special rate rider.

My testimony explains that the incremental investment costs were actual. They were necessary and prudently part of the project incurred by the company to bring the project into service.

As our legal brief points out, utilities are entitled to recover the cost of prudent investments and there is no basis for denying recovery of actual costs just because they were higher than an estimate early in the development process.

Based on all of the information, the company respectfully requests that it be allowed to recover the full investment cost in Nobles. And this completes my statement and thank you.

15 MS. VALLEY: Thank you, Mr. Alders. Mr. Alders 16 is available for cross-examination.

17 MR. SMITH: Staff. Mr. Soye, please proceed.

18 MR. SOYE: Thank you, Mr. Smith.

CROSS-EXAMINATION

20 BY MR. SOYE:

Q. Hello, Mr. Alders. How are you. I hope I can make

22 this as brief as possible. I know it's early in the

23 morning and I'm not quite awake myself yet so if I'm not

24 being clear at any point just let me know and I'll repeat

25 or clarify anything you need me to.

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to your testimony that's been admitted into evidence as

For some of my questions I'm going to be referring

3 of now and if you ever want to read along, you don't know

the specific points I'm talking about, please let me

5 know. I will point you to the exact spots I'm referring

6 to. But I'm quite certain that anything I'm referencing

7 you'll know well enough that if I have a misreading

8 you'll correct me quickly.

9 So I would like to begin by talking about the 10 planning process you identified in your prefiled rebuttal 11 testimony. And specifically I'm referring to page 4 of 12 your rebuttal testimony, line 23.

13 Now here you are -- in this section I should say you 14 begin by explaining the integrated system approach that 15 Xcel utilizes to perform planning activities. And you

16 say that this approach is used for renewables as well and

17 specifically I'd like to point out starting at line 23

18 you say, "Consistent with the system approach the

19 forecast used to determine systems renewable resource

20 needs includes our customers' needs in Minnesota,

21 Michigan, North Dakota, South Dakota, and Wisconsin."

22 Now here I just want to be sure that when you're 23 explaining the system needs because we've said -- used 24 the term "needs" a lot and you're using the term "needs"

25 here. The word "needs" as you define it is complying

- 1 with the five states' Renewable Energy Standards that
- 2 you've listed here?
- A. In the context here, yes.
- Q. Okay. And then if you flip the page, you go on to
- 5 say, "We forecast the number of customers in the megawatt
- 6 sales by customer class for these five jurisdictions
- 7 separately and then aggregate them."
- 8 So now you have all of your total number of
- 9 customers and your megawatt sales, and then you proceed
- 10 to compare the forecasted energy and peak demand
- 11 requirements to the generational resources available, and
- 12 I assume it's to fulfill these requirements as you've
- 13 found all your customers and all your requirements that
- you say what resources do we have available and what do 14
- 15 we need to build in addition to satisfy those needs.
- 16 And if I haven't been clear on my question, just let
- 17 me know.
- 18 A. No. Excuse me, Mr. Soye. I was just reviewing to
- 19 make sure I answered your first question correctly and
- 20 indeed you are correct.
- 21 Q. Okay. And actually I feel like I've already stated
- 22 the third point is once you identify these needs you
- 23 identify the initial resources. So in the aggregate
- 24 planning process for renewable resources the need is
- 25 identified by satisfying these RES standards so the
- 130
- 1 aggregate standards of your five states you just
- determine whether or not all those standards have been
- 3 satisfied?
- 4 A. Correct.
- 5 **Q.** Okay. And when the decision was made to construct
- 6 Nobles, Xcel had already achieved the South Dakota
- 7 renewable objective of 10 percent by 2015. In fact, it
- 8 had slightly surpassed it by .3 percent, I believe?
- 9 A. That's correct.
- 10 **Q.** And in fact four of the five states that you list
- 11 here, and I think your operations have changed to include
- 12 more states by now if I'm correct but at this time the
- 13 South Dakota, North Dakota, Minnesota, Wisconsin, and
- 14 Michigan, four out of those five states had renewable
- 15 energy objectives or Renewable Energy Standards of 10
- 16 percent by 2015.
- 17 A. Correct.
- 18 **Q.** So the only state that is above that was Minnesota.
- 19 So in essence Minnesota -- on this integrated planning
- 20 approach Minnesota is driving the renewable buildout
- 21 policy that Xcel adheres to?
- 22 A. Mr. Soye, I should clarify. Wisconsin's requirement
- 23 is slightly above 10 percent. I believe it's in effect
- 24 12 something.
- 25 Q. Okay. Okay. And I knew there was something with

- 1 that. It's 2015 for the entire state and I wasn't sure
- what your percentage share of Wisconsin's service was but
- 3 thank you for correcting me on that.
- 4 So roughly all of them are 10 to 12 percent except
- 5 for Minnesota?

6 A. Correct.

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- 7 Q. Okay. Now I would like to refer you to --
 - MR. SOYE: Mr. Smith, I guess I'm a little bit
- 9 unfamiliar on procedure. My witness Kavita Maini has not
- 10 testified yet and I want to refer to our exhibit but it
- 11 has been stipulated into evidence.
 - MR. SMITH: It's an exhibit in evidence.
- 13 MR. SOYE: Okay. Thank you.
- 14 Q. Okay. Mr. Alders, if I could have you refer to
- 15 Staff's Exhibit 1, which is Ms. Maini's direct testimony,
- 16 and I'm not going to ask you any questions about her
- 17 direct testimony. I would actually like you to reference
- 18 Schedule 1, the first attachment to that document.
- 19 A. Mr. Soye, I think I have to look at Staff 2. I
- 20 believe it's confidentially marked.
- 21 Q. Oh. Yeah. That's fine. Sorry about that. Oh,
- 22 wait. Hold on one second.
- 23 Mr. Alders, I actually was correct the first time
- 24 when I said Schedule 1. And I realize that document is
- 25 marked confidential and I also understand it's marked
- - confidential because certain aspects contained in that

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3 individual brackets saying confidential information. And

document are confidential which are also marked off by

- I would like to reference that document and I suppose
- 5 it's up to the Commission whether or not we need to go
- 6 off record for that or if I simply avoid any of the
- 7 internal references to confidential information.
- 8 MR. SMITH: Yeah. If you're not going to
- 9 reference those specific things that are denoted as
- 10 confidential, we do not need to go into closed session.
- 11 MR. SOYE: Okay. Well, then I will proceed on
- 12 that aspect unless Xcel has anything to say about that.
- 13 MR. SMITH: Is that acceptable to Xcel?
- 14 MS. VALLEY: Thank you. That's acceptable.
- 15 MR. SMITH: Okay. Just be careful. Let's not
- 16 reference any of the confidential numbers then.
 - MR. SOYE: Okay. Thank you.
- 18 **Q.** All right. So referencing that Schedule 1, if I
- 19 could have you look to -- okay. Well, first off do you
- 20 recognize this document? I guess I should start off
- 21 there.

- 22 A. Ido.
- 23 Q. Okay. And this is Xcel's Petition to the Minnesota
- 24 PUC for approval of the Nobles and at that time the
- 25 Merricourt projects?

- 1 Α. That's correct.
- 2 Q. And you were responsible for preparing this
- document?
- Α. Yes.
- 5 Q. Okay. Now this Petition was filed under subdivision
- 6 9 of Minnesota Statute 216B.243; correct?
- 7 Α. Mr. Soye, this had two purposes.
- 8 Q. Uh-huh.
- 9 Α. This was filed under I believe it's 216B.1645 for
- 10 the purpose of gaining the Commission's approval that the
- 11 Nobles and Merricourt projects were eligible renewable
- 12 energy projects and their costs could be recovered
- 13 through the renewable energy rider in Minnesota.

14 The second request was to find that the project did

15 comply with the section you mentioned and would be exempt

- 16 from the certificate of need process in Minnesota.
- 17 Q. Okay. And thank you for correcting me. I guess I
- 18 get focused on one thing and just disregard everything
- 19 else. But I'd like to specifically focus on what you
- 20 were talking about, the subdivision 9 for the exemption
- 21 from the certificate of need.
- 22 This provides a certain type of expedited process to
- 23 the approval for this wind farm as you no longer need to
- 24 comply with the certificate of need requirements;
- 25 correct?

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- 1 A. Correct. The purpose of the exemption in the
- statute was in recognition that the information you
- 3 provide as part of the eligibility proceeding in essence
- 4 is very similar to the information that would be provided
- 5 in a need proceeding. And so the exemption was put in
- 6 place for the purpose of trying to avoid duplicative
- 7 proceedings before the Commission.
- 8 **Q.** Okay. However, on what you said there, there is
- 9 certain documents, certain showings that are required
- 10 under the regular certificate of need process which are
- 11 not required under subdivision 9.
- 12 A. I would agree.
- 13 Q. You would agree. Okay. And specifically I'd like
- 14 to refer to some of those. And this is quoting directly
- 15 from 216B.243. Would you like a copy of this to look at
- 16 while I'm reading?
- 17 A. We'll see. I don't think I need it.
- 18 MR. SOYE: Would opposing counsel like a copy of
- 19 this?
- 20 MS. VALLEY: Thank you, Mr. Soye. I would
- 21 appreciate a copy.
- 22 MR. SOYE: Sorry. I just figure -- I almost
- 23 have some of our statutes memorized backwards so --
- 24 Q. And specifically I'm looking again at 216B.243, and
- 25 I'm looking under subdivision 3 showing required for

1 construction. And this is the showing which is normally 135

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- 2 required under the certificate of need. And three areas
- 3 I'd like to identify is that under the regular
- 4 certificate of need process a showing is needed to show
- 5 the Commission that, number one, the accuracy of the
- 6 long-term energy demand forecast on which the necessity
- for the facility is based.
 - Now, again, the forecast in here you say well, it's
- 9 duplicative information. And perhaps this is duplicative
- 10 because in the setting of Renewable Energy Standards the
- 11 demand forecast is simply the Renewable Energy Standard
- 12 itself.

- 13 A. In our Petition we presented the strategist analysis
- 14 I talked about and part of that strategist analysis is
- 15 the forecast of demand and energy requirements for our
- 16 customers. And so the forecast of demand and energy
- 17 requirements as part of that strategist analysis is
- 18 included in the eligibility Petition.
- 19 It's not examined or presented, I should say, in the
- 20 detail that would be required in a certificate of need,
- 21 but if there's any issue associated with forecasting in
- 22 the strategist results that an intervener would like to
- 23 raise, they have the opportunity to do that in an
- 24 eligibility proceeding as well.
- 25 Q. Okay. So I think we're on the same page that you
- - 1 say, you know, this just wasn't presented, maybe it's
 - 2 done but it wasn't presented in this document.
 - 3 Okay. I would also like to point out No. 3, which
 - 4 is, you know, normally you'd have to put a showing of the
 - 5 relationship of the proposed facility to the overall
 - 6 state needs. And, again, this is just going back to my
 - 7 same point that the needs are referencing the RES
 - 8 generally as, you know, we've identified in the planning
 - 9 process for renewable standard resources. And if you
- 10 want to say anything on that, or else I'll continue.
- 11 A. Well, I would. Thank you. I would like to clarify
- 12 that in the context of the system need, not only when we
- 13 look at a renewable resource, we look at how it performs
- 14 along with the rest of the generation resources we have
- 15 available to us to meet the needs of our customers.
- 16 And so, yes, we examine what's necessary to meet the
- 17 renewable energy policies of the states we serve in, but
- 18 then we use the strategist model, which is a simulation
- 19 model of the operation of the entire system without
- 20 regard to the type of resource.
- 21 Q. Uh-huh.
- 22 A. And in that context the strategist model provides
- 23 cost estimates that we incorporate in our analysis as
- 24 well. So it's not an either/or proposition.
- 25 Q. Okay. Okay. Thank you. And then No. 6 here says

- 1 you would normally make a showing of possible
- 2 alternatives to satisfy any energy demand. But here
- obviously, again, that's not an option because you have
- 4 to meet the Renewable Energy Standards regardless. And
- 5 in fact that's 25 percent of that Renewable Energy
- 6 Standard in Minnesota must be satisfied through wind so
- 7 we don't really examine the alternatives here; correct?
- 8 A. Not quite. The Minnesota Renewable Energy Standard
- 9 is presented as a requirement but there are what we call
- 10 off ramps in the statute as well, which say that if
- 11 meeting the renewable energy requirements causes a
- 12 reliability concern or has a significant impact on rate
- 13 payers, then the utility or some intervener has the
- 14 opportunity to petition the Minnesota Commission to
- 15 either -- to adjust the RES in some way, either by
- 16 reducing the requirement or extending the time frame for
- 17 the requirement or taking some other action.
- 18 And so it recognizes cost-effectiveness in some
- 19 degree just as the other states do.
- 20 **Q.** And Xcel hasn't filed any of those requests to be
- 21 exempted from the Renewable Energy Standard as of this
- 22 point; correct?
- 23 A. We have not. We've been able to add renewable
- 24 energy resources at cost-competitive prices. And through
- 25 our early adoption, there were additions to our system.
- 1 Early in the process the overall cost of wind power has
- been relatively low and economical.
- 3 Okay. Thank you. Now I would like to reference a
- 4 statement you make in your prefiled rebuttal testimony.
- 5 And I mean it's right in line with what you're saying
- 6 now. On page 9, line 9 you say -- and I'll give you a
- 7 second to get there.
- 8 You simply refer that it is not correct to treat
- 9 Minnesota's renewable energy policy as the sole
- 10 motivation for the addition of the Nobles project. And
- 11 you've provided several reasons here.
- 12 But throughout this document, this exhibit that we
- 13 have just been referencing I have identified at least
- 14 three statements in which you say that this project is
- 15 intended -- actually the Nobles and Merricourt project
- 16 are intended to meet -- they are meant to meet the
- 17 Renewable Energy Standard in Minnesota. I believe you're
- 18 referring to all five at that point.
- 19 So, I mean, even though you're saying that's not
- 20 correct to say that, you do, in fact, say that in this
- 21 filing.
- 22 A. Mr. Soye, the purpose of that Minnesota Petition was
- 23 to demonstrate that the Nobles project was eligible as a
- 24 renewable energy resource under the Minnesota standard.
- 25 So that was the standard that the Minnesota Commission

- 1 was required to use which is that it is a reasonable
- 2 addition to our system to meet the Minnesota RES.
- 3 That does not necessarily follow that it is the only
- 4 purpose for the project.
- 5 Q. Okav.

- 6 A. Just as we've presented in this case, that we plan
- and operate our system in aggregate so too we've made
- 8 those points to the Minnesota Commission, that the energy
- 9 associated with these projects will be allocated across
- 10 our system.
- 11 **Q.** Okay. And you said something there. You said, you
- 12 know, this is the Minnesota standard. And I believe what
- 13 you're saying to me is this is the Minnesota standard so
- 14 obviously I said that. I mean, I'm presenting this to
- 15 the Minnesota Public Utilities Commission so that's
- 16 what's included in their statute so that's what I'm going
- 17 to quote. Am I correct?
- 18 A. Correct. We were presenting to the Minnesota
- 19 Commission our case for meeting their standards so that
- 20 the portion of the Nobles project that serves Minnesota

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- 21 customers could be recovered through the rider.
- 22 **Q.** Okay. And so you recognize that if a different
- 23 state had a different standard that they generally
- 24
- follow, you would provide alternative information to
- 25 comply with that standard?

- 1 A. We certainly try to do that, yes.
- Q. And in your surrebuttal testimony you state, you
- 3 know, the -- page 3 of your surrebuttal testimony the
- question is asked of you why did you provide the second
- 5 different stratus modeling in South Dakota and when that
- 6 particular modeling was not filed in Minnesota.
- 7 You know what? I think I am referencing the
- 8 incorrect question.
- 9 You know what? I'm just going to gloss over that
- 10 question because I seemed to have marked the wrong page.
- 11 But that's okay. There's more. Glad to hear that.
- 12 Okay. Well, let's move on. I'd like to talk to you
- 13 about the second modeling approach that you've provided
- 14 Staff. Now in your prefiled rebuttal testimony you
- 15 provided Staff with what we -- the second modeling
- 16 approach which shows Nobles is justifiable on economy of
- 17 energy basis; is that correct?
- 18 A. Just to make sure we're talking to each other about
- 19 using terminology, we presented analysis that
- 20 demonstrates that system costs over the next 20 or 30
- 21 years will be lower on a present value basis with the
- 22 addition of a Nobles project compared to our system cost
- 23 without adding the Nobles project.
- 24 And so some people use the term "economy energy" in
- 25 a very different way than that and so --

- 1 Q. And I will look at my expert here to see if that's
- 2 how we've understood it.
- 3 MS. MAINT: No.
- 4 Q. Well, we'll continue with this anyway and whatever
- **5** she wants to say about that, she can.
- 6 Now I just -- maybe that doesn't even matter for the
- 7 purposes of my questions so we'll just continue with
- 8 these. First of all, when I say second modeling approach
- 9 you know which one I'm speaking of? It's obviously not
- **10** the conservative as you've identified nor the comparison
- 11 to the MISO market?
- 12 A. I do understand.
- **13 Q.** Just as a preliminary, you know, like I stated in
- 14 our opening statement, we didn't receive this or hear
- **15** about this modeling approach until your prefiled
- **16** testimony on April 27.
- 17 A. That's correct.
- 18 Q. And when -- I mean, when was this developed? Was it
- **19** developed at the same time as the conservative modeling
- 20 approach or in response to our questions?
- 21 A. It was prepared at the time of the selection of the
- 22 Nobles Wind Farm in 2008.
- 23 Q. Okay. Okay. And I assume in order to provide a
- **24** proper comparison to the conservative modeling approach
- 25 all the same inputs were used as in the initial run.
 - A. That's correct.
- **Q.** Okay. And, you know, I do have to ask again if this
- 3 was available at the time that these interactions were
- 4 taking place by the parties, why wasn't it presented to
- **5** us?

- 6 A. I wish we would have presented it. I was not aware
- 7 that it existed until we responded to your written
- 8 testimony. Had I been aware that our resource planning
- 9 group had prepared it back in their initial evaluation, I
- 10 would have included it in our responses to data requests.
- 11 I dearly wish that I would have known it was available.
- 12 But, in essence, we were focused on the presentation
- 13 of what had been adequate for both the Minnesota and the
- 14 North Dakota jurisdictions in their determinations of
- 15 reasonableness and prudence. And so we presented that to
- 16 you and didn't dig deeper with our resource planning.
- 17 Q. Okay. Okay. So you say developed by our resource
- 18 planning group. So was this modeling approach, these
- **19** modeling runs, the conservative modeling run and the
- 20 second modeling run when you say prepared by our resource
- **21** planning group I just want to make sure, does that
- 22 include you?
- 23 A. No. I'm involved in the presentation of our
- 24 analysis to our regulators, and I did not direct or do
- 25 the modeling work myself.

1 Q. Okay. Okay.

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- With respect to this -- well, to both modeling runs,
- **3** I suppose, as I asked earlier, I have assumed the same
- 4 inputs were used. And you confirm that. If you could
- 5 refer back to the Staff's Exhibit 1, Schedule 1. And I'm
- **6** specifically looking at -- well, in the upper right-hand
- 7 corner it would be labeled page 56 of 67. And I can get
- **8** you the regular page number here in a second as well.
- **9** 35. Page 35 at the bottom.
- 10 A. I'm there.
- **11 Q.** And on table 3 it lists the sensitivity analysis
- **12** performed with the strategist model. And I realize this
- 13 is a summary but, you know, the preceding paragraphs say
- **14** approximately the same thing. And here you provide --
- **15** you know, you test the rigor of the investment. You
- **16** provide your base case.
- What happens if no production tax credit continues
- 18 and then your two CO2 cases and a gas case of plus 20
- **19** percent. I'm just wondering what would have happened, at
- 20 the time when you were considering this what would have
- 21 happened if gas decreased by 20 percent?
- 22 A. In this analysis we haven't presented a specific
- 23 number with regard to the impact of lower gas prices, but
- 24 in general I would expect the cost of the alternative to
- 25 the wind farm would be lower. And, thus, the -- excuse

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 1 me. The net cost of Nobles compared to the alternative
 - 2 would go higher.
 - **3** Q. Okay. And now was that -- I guess I don't know if
 - 4 you would know the answer to this. And I'll give you a
 - 5 minute. I know when I talk at all I have to drink
 - 6 several bottles of water.
 - 7 Now this summary that's laid out, I'm wondering, the
 - 8 gas plus 20 percent, the gas minus 20 percent, for that
 - **9** matter the gas plus 10 percent or minus 10 percent or
 - 10 load factors plus or minus 10 percent -- I'm sorry. Load
 - 11 growth. My expert just corrected me. Why weren't those
 - 12 tested? I mean, are they -- I assume that they're
 - 13 normally tested when you're anticipating investing in a
 - 14 large-scale resource to, as I said earlier, test the
 - 15 rigor.
 - 16 A. Usually we do make those analyses or sensitivity
 - 17 tests. We don't always present all of them in our
 - 18 Petitions.
 - 19 Q. Okay. But I assume since you said you weren't
 - 20 involved in this specific one you didn't know that the
 - 21 offset -- the second modeling approach existed, that
 - 22 perhaps you aren't exactly sure what sensitivities were
 - **23** run in this specific case.
 - 24 A. Just to be clear, the table on page 35 of the
 - 25 Minnesota Petition has to do with the conservative

- 1 analysis that was originally presented.
- 2 Typically all of our strategist modeling includes
- 3 those sensitivity tests, but as I sit here, I cannot
- 4 recite exactly which sensitivity tests were performed.
- 5 Q. Okay. Okay. Thank you.
- 6 Now -- okay. I think that's all I have to ask you
- 7 on those sensitivities.
- 8 Now I'd like to move ahead and in the same relation
- 9 to the second modeling run or approach we've been talking
- 10 about. I'm going to have to read this because I read it
- 11 from your testimony and I can't say it nearly as well as
- 12 you can. So you provided this modeling scenario that
- 13 recognizes Nobles as the next unit of wind being added as
- 14 opposed to the conservative modeling approach which
- 15 treats Nobles as being added after an additional 2,000
- 16 megawatts of new wind; is that correct?
- 17 A. That's right.
- 18 Q. Okay. And that 2,000 megawatts of new wind you've
- 19 identified is the overall compliance with the Renewable
- 20 **Energy Standards?**
- 21 A. The standards and goals of the five states we serve,
- 22 yes.

- 23 Q. Okay. Now the cost difference -- and I might not
- 24 understand this correctly so please inform me if I
- 25 haven't. The cost difference that results from placing
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- Nobles next in this dispatch stack versus at the end
- results from the avoided costs that are realized from it
- 3 taking over for more expensive units as opposed to
- 4 switching on, so to speak, after the additional 2,000
- 5 megawatts.
- 6 A. In essence, you are correct. If you think about it,
- 7 the dispatch order of power plants on our system goes
- 8 from most economical to most expensive. We utilize the
- 9 most economical power plants first, and we add additional
- 10 power plant increments to the system operation and as we
- 11 do it each of those increments becomes a little more
- 12 expensive. And so if a wind farm operates it displaces
- 13 or reduces the output from the last power plant on the
- 14 system. And so if the Nobles project is modeled as the
- 15 next increment of power to be added to the system, the
- 16 energy it's displacing is lower cost energy than a
- 17 conservative model in which it's replacing energy only
- 18 after another 2,000 megawatts of wind are displacing
- 19 energy.
- 20 And so the avoided cost of the fuel at the power
- 21 plant associated with the Nobles project changes pretty
- 22 significantly in those two models.
- 23 Q. Okay. And I just want to make clear, in a model,
- 24 you know, we're assuming that these units sort of
- 25 progress in a domino effect. Once they have an avoided

- 1 cost or a higher cost unit to replace, then the model
- 2 assumes that they switch on to capture this
- 3 cost-effectiveness
- 4 But, I mean, in reality when wind blows it blows and
- 5 the windmills are going to spin unless you curtail them.
- 6 So it's not going to be this domino effect; correct?
- A. We've tried to capture what you're talking about in
- 8 the way in which we modeled the wind resource in
- 9 strategist. We take a look at a typical pattern of wind
- 10 production over a year and feed that into the modeling
- 11 exercise to try and account for the very issues you're
- 12 talking about.
- 13 So while the strategist model doesn't take a look --
- 14 it's not a chronological model. That is, it doesn't take
- 15 a look at each period of time and examine exactly what's
- 16 available. It does account for the effects associated
- 17 with that over a larger period of time.
- 18 **Q.** Okay. So you look at these averages when how much
- 19 wind blows at what particular time and that's how much
- 20 it's going to be able to add to the system?
- 21 A. Yes.
- 22 Q. If I understand correctly. And when you say we
- 23 tried to model that in strategist, are you specifically
- 24 referring to the conservative modeling approach?
- 25
- A. In any modeling effort that includes wind power, we

- have a pattern of wind production that's included in the
- modeling so it's in the hall of the analysis, regardless
- 3 of the scenario.
- 4 **Q.** Now when we're looking at how the wind will affect
- 5 your system, can I refer you to your rebuttal testimony?
- 6 And let me see if I can find my spot here. This seems to
- 7 be a recurring thing with me, and I apologize for that.
- 8 It would be page 16 of your rebuttal testimony. And
- 9 if you review table 1 here you're providing cost
- 10 comparison of the conservative modeling approach or
- 11 analysis with the secondary modeling analysis.
- 12 And in the secondary modeling analysis you've stated
- 13 here that this is the incremental analysis only looking
- 14 at the addition of Nobles without any additional wind for
- 15 future compliance. And that's how it was modeled, just
- 16 by itself.
- 17 A. Well, what the model does -- what we did was we --
- 18 we ran the analysis using strategist, assuming no
- 19 additional wind would be added to our system above and
- 20 beyond what's currently in place. Got a result.
- 21 And then the result is here are the fossil fuel
- 22 resources that needed to be added to the system over
- 23 time, and here is the present value of the cost of
- 24 operating your system over time.
- 25 Q. Okay.

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- 1 A. We then compare that to the same analysis, only we
- 2 add -- we hardwire, if you will, or add the Nobles
- project into the model. The model then comes up with the
- fossil fuel resources needed to meet whatever demand
- 5 remains and offers a cost of operating the system and
- 6 adding those resources on a present value basis.
- 7 The numbers you see here are the differences between
- 8 them, those two scenarios.
- 9 Q. Okay. But, I mean, this scenario doesn't reflect
- 10 reality because Xcel has not come out with a statement
- 11 saying we are not planning to comply with the Minnesota
- 12 RES. It's my understanding that you continue to --
- 13 continue to plan to meet this RES. So just assuming that
- 14 no wind will be put on the system after Nobles, that's
- 15 not actually going to happen.
- 16 A. It may or may not, depending on the price of future
- 17 wind energy. The purpose was not to simulate compliance.
- 18 The purpose was to better identify what the incremental
- 19 impact of Nobles on our system would be.
- 20 We weren't trying to make a statement about whether 21 or not we were compliant in the future.
- 22 Q. And I understand that. And I just have to ask you
- 23 about something you just said. You know, it may or may
- 24 not be true that we complied with the Minnesota RES after
- 25 Nobles but, in fact, you have already built additional

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- wind since Nobles. In fact, I think you're going through
- an advanced determination for prudence on Geronimo?
- 3 We have made another purchase from an independent
- 4 power supplier. So we have a power purchase agreement
- 5 for an additional 200 megawatts of wind power, yes,
- 6 called the Prairie Rose Wind Farm.
- 7 Q. Okay. So there's some additional wind there.
- 8 A. Again, that has nothing to do with the analysis and
- 9 the purpose of this. With the addition of Prairie Rose,
- 10 we've already got Nobles in place and so the analysis to
- 11 look at the impact of those two projects on our system is
- 12 a completely different construct than taking a look back
- 13 in 2008 at whether or not this wind farm would add
- 14 economical power to our system.
- 15 Again, the analysis -- these scenarios are not
- 16 confined to look only at total compliance with all of the
- 17 renewable energy requirements regardless of cost.
- 18 They're structured to try and probe what impact those
- 19 resources have on our system.
- 20 **Q.** Okay.
- 21 Α. And what we are doing then is this incremental
- 22 analysis.
- 23 Q. Okay. And you keep repeating that term, the impact
- 24 on your system. So I'm just wondering -- you say that
- 25 this model measures the impact on your system of Nobles

- 1 or any other investment you might have.
 - Are you -- is that the same as determining the
- 3 cost-effectiveness, the cost benefit of a resource
- 4 addition?

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- 5 A. Yes. That's what I had in mind.
- 6 **Q.** Okay. Okay. And since the cost benefits from
- Nobles come from -- I'm sorry. Let me repeat that.
 - Since the cost benefits identified in the second
- 9 modeling approach as opposed to the conservative modeling
- 10 approach come from this difference in avoided cost --
- 11 well, and I'm just trying to frame this right now.
- 12 If you add additional wind after Nobles, then the
- 13 incremental benefit decreases with each addition.
- 14 A. Mr. Soye, I don't think that's quite the right way
- 15 to look at things. With regard -- let's take the Prairie
- 16 Rose example to illustrate.
- 17 Prairie Rose comes along in 2012. We were
- 18 evaluating over 100 and some bids from developers to
- 19 determine whether or not Prairie Rose was a good resource
- 20 to add to our system.
 - At that point in time Nobles was already in service
- 22 and is already part of our fleet. And so it will bring
- 23 whatever benefits we estimated and whatever benefits will
- 24 result over the next 25 years.
 - But the question then becomes another incremental
- question when we have to evaluate the next wind resource
- like Prairie Rose. We went through a similar analysis
- 3 that we've presented here in this case to determine
- whether or not Prairie Rose was a prudent resource to add
- 5 to our system, given what we knew about alternatives at
- 6 the time we were making the Prairie Rose decision.
- 7 And so the interaction that you've tried to
- 8 summarize isn't quite correct. Each time we add wind
- 9 resources or other resources to our system, we have to
- 10 take a look at whether or not that addition to our system
- 11 is going to be a cost-effective compared to the
- 12 alternatives, based on what we know at the time.
- 13 All of these are estimates. We're projecting how
- 14 the system's going to operate over a 20- or 30-year
- 15 period. We're making assumptions about what the future
- 16 cost of gas will be based on what we know at the time.
- 17 We're making assumptions about what the forecasts of
- 18 electrical demand and energy consumption are going to be
- 19 over an extended period of time.
- 20 There isn't -- you know, there isn't precision like
- 21 there is in accounting or rate making in these kinds of
- 22 analyses. We do the best we can based on the information
- 23 available to us to make prudent decisions at the time.

Q. And I understand that. And maybe I was unclear with

- 25 my question. My point was only to state that, you know,
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- 1 when we look at this conservative modeling approach and
- 2 the secondary modeling approach, when you say, well, we
- have 2,200 megawatts of wind on the system versus Nobles
- 4 in and of itself, there isn't a difference between the
- 5 incremental benefit of each megawatt of wind after that.
- 6 Because when you're 2,200 megawatts of wind what it's
- 7 replacing, the higher cost units as you've described
- 8 where Nobles is on the system it's replacing these very
- 9 high cost units but then as you get more and more and
- 10 more the incremental cost of each unit it replaces
- 11 decreases. Because your highest cost units will always
- 12 be your highest cost units. I mean -- I think you
- 13 understand what I'm saying there.
- 14 Generally I agree. And that's why we identified the
- 15 first analysis we presented in the Minnesota Petition as
- 16 conservative. The Minnesota RES allows those off ramps.
- 17 If the cost of wind power becomes too high relative to
- 18 the alternatives it's not a foregone conclusion that we
- 19 will continue to have wind power.
- 20 Q. Uh-huh.
- 21 A. As we've presented in our most recent resource plan,
- 22 production tax credits, which are a big component for
- 23 wind power appear that they may not be renewed in the
- 24 near future. And if that's the case, there's potential
- 25 for the cost of wind power to increase substantially.

And if it does, that may be motivation for one of

- those off ramps. And if that occurs, then we may not add
- 3 additional wind power to the same degree that that model
- 4

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- 5 **Q.** And I understand these uncertainties, especially
- 6 with the PTC. I'm sure if you ask everyone in this room
- 7 you're going to have three different answers of whether
- 8 or not those are going to be continued.
- 9 But my point is only when we look at this, the
- 10 difference between when you have more wind or less wind
- 11 you're getting this incremental difference. And the cost
- 12 benefits that you have provided here in your second
- 13 modeling approach works only until you add additional
- 14 units of wind.
- 15 And, in fact, there are additional units of wind.
- 16 And I know that you say well, things might change but, in
- 17 fact, they're -- as of now there's no reason to assume,
- 18 from my perspective that you are not going to continue
- 19 adhering to the Minnesota Renewable Energy Standard.
- 20 I respectfully disagree. It is very possible that
- 21 if prices are not competitive compared to the
- 22 alternatives, we will not add additional wind power.
- 23 We've made it very clear in our resource plan that
- 24 we are in a very good position. We can comply with the
- 25 Minnesota standard, the Wisconsin standard, and the goals

- 1 of the other jurisdictions with the wind power we have in 2 place until late in the decade.
- 3 And so we can bide our time, if you will, to add
- 4 additional resources until they're cost-effective. And,
- 5 indeed, if we approach that period in time when we no
- 6 longer have adequate resources to comply with all
- jurisdictions' renewable energy policies and wind power
- 8 is still very costly compared to the alternative, we have
- 9 the opportunity to make our case in front of the
- 10 Minnesota Commission for Compliance with their standard
- 11 and get it reduced if that's the right thing to do.
- 12 Q. Uh-huh.
- 13 A. So the appropriate way to look at all of this is to
- 14 do an incremental analysis to take a look at what the
- 15 impact of each addition to the system is. We've provided
- 16 that conservative analysis, recognizing that it didn't
- perfectly present how the system would be operated. And 17
- 18 the other jurisdictions found that that was adequate.
- 19 Not that it was the precise answer or the only answer but
- 20 it was adequate for the purpose of determining whether or
- 21 not it was reasonable to add that particular unit to the
- 22 system.
- 23 Q. Okay. Thank you. And I suppose, you know, I should
- 24 have been clearer that my statements of whether or not --

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25 and I guess I should have made this clear to the

Commission. All statements that I'm making obviously,

- and I'm sure you're approaching it the same way, that it
- 3 was back in 2007 when we were making these decisions, not
- 4 now.

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- 5 And, you know, you certainly know the inner workings
- 6 of your company better so I suppose we can simply
- 7 disagree on the fact that there is or there is not
- 8 evidence that you're not going to continue complying with
- 9 the Minnesota RES. And maybe I should have been more
- 10 specific too that my point is only that whether or not
- 11 you're going to add any additional wind, maybe not even
- 12 reach that 25 percent, it's going to change this. And as
- 13 you say, you know, maybe we aren't going to add any more
- 14 wind and, like I said there, we can just agree to
- 15 disagree, I suppose.
- 16 Now I guess I just have one more question.
- 17 MR. SOYE: One moment, please, Mr. Smith.
 - (Pause)
- 19 MR. SOYE: I apologize, Mr. Smith. I think that
- 20 we are ready to go.
- 21 **Q.** Now I hope I can say this right. Are you testifying
- 22 or have you stated that under the conservative modeling
- 23 approach if you have all 2,200 megawatts of wind online
- 24 by 2020 because that's what you assumed in this model,
- 25 that the costs of Nobles -- I'm sorry. The benefits of

- 1 Nobles would exceed the costs of Nobles?
- 2 Not in that scenario, no.
- **Q.** Okay. Okay. But in the second model -- or the
- 4 second modeling approach that benefits do exceed the
- 5 costs, but the RES is not complied with.
- 6 A. The model identifies based on the information that
- was available back in 2007 and '8 that benefits exceeded
- 8 costs. I don't -- I think it's the shorthand of saying
- 9 but we did not comply yet with the RES is not quite
- 10 accurate.
- 11 In the sense that the model did not add additional
- 12 wind power through the -- throughout the planning period
- 13 to maintain compliance with RES, you are correct. But,
- 14 again, that was not the purpose of the model.
- 15 The model took a look at what the incremental impact
- 16 of Nobles would be if no additional wind power would be
- 17 added. And for each increment of wind power added after
- 18 Nobles, it's more appropriate to take a new, fresh look
- 19 at its incremental impact on the system, rather than
- 20 relying on the -- a conservative approach that was
- 21 presented in this case.
- 22 **Q.** Uh-huh. Uh-huh. Okay. I'm sorry. We're almost
- 23 finished here.

- 24 Now when you're performing these models and you're
- 25 assuming this integrated system approach and, you know,
 - you've indicated that, you know, perhaps there's a chance
- that we are not going to satisfy the Minnesota RES, times
- 3 are changing, things are changing and then you mention
- 4 these off ramps that are included in the Minnesota
- 5 Renewable Energy Standard, but if you are not granted
- 6 those off ramps and you do not comply with the Minnesota
- 7 RES, there are monetary penalties up to the amount of
- 8
- a -- what a project would cost.
- 9 And I'm wondering how are those costs assumed to be 10 distributed for noncompliance?
- 11
 - MS. VALLEY: Mr. Smith, I would object to that
- 12 question as calling for some speculation.
- 13 MR. SMITH: I'm going to sustain the objection.
- 14 MR. SOYE: All right. Well, then I suppose --
- 15 **Q.** Okay. One last question. On page 4, line 19, this
- 16 is nothing technical so if you are okay with me reading
- 17 it, you say to support -- and this isn't part of the
- 18 quote yet. To support an efficient and effective
- 19 planning and diverse integrated system you say, "It is
- 20 not appropriate for one jurisdiction to carve out
- 21 elements of the integrated system that based on a
- 22 stand-alone view it sees as incrementally more or less
- 23 beneficial to customers in that jurisdiction."
- 24 And since you've made this statement, I just have to
- 25 ask what effect does the Minnesota RES have except

- 1 carving out a specific element that it sees more
- 2 beneficial to the Minnesota customers as against the
- 3 additional four states that you've listed -- that are
- 4 listed in these documents?
 - A. So far in our efforts to comply with the policies of
- 6 Minnesota and the other states we have been in a position
- where we can meet those goals and policies with
- 8 cost-effective electricity from wind power and other
- 9 renewables.
- 10 Each state has different tax policies. Each state
- 11 has different public policies of all sorts. And we make
- 12 every effort to comply with all of them as we develop our 13 system.
- 14 Different states have different conservation
- 15 policies, for another example.
- 16 I think in complying with that Minnesota Renewable
- 17 Energy Standard we're not doing it blindly without
- 18 consideration of the cost of the energy that results.
- 19 And so it's in some respects very similar to the
- 20 South Dakota or North Dakota or Wisconsin renewable
- 21 energy policy in that all the states recognize, to
- 22 varying degrees albeit, recognize that at some point it's
- 23 not reasonable to add more renewables if it's going to
- 24 have a significant impact on customers.
- 25 Now each of the states might have a little bit
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 - different view of where that threshold is, but to date we haven't had to face that question because we have been
 - 3 able to provide wind additions that are cost-effective,

 - cost competitive for our customers.
 - 5 **Q.** And I understand what you're saying and I also want
 - 6 to mention I know this isn't your statute. You're just
 - 7 the messenger and you happen to be on the chair so you're
 - 8 the one being questioned. But thank you for responding
 - 9 to all my questions.
 - 10 MR. SOYE: Mr. Smith, I believe that's all I
 - 11 have.
 - 12 MR. SMITH: Go to Commissioner questions,
 - 13 advisor questions. Chairman Nelson.
 - 14 CHAIRMAN NELSON: Thank you. Mr. Alders, I'd
 - 15 like to start with your table on page 16 of your rebuttal
 - 16 testimony. And I think we just finished with that so you
 - 17 might have it up there.
 - 18 The first row where we're talking about the
 - 19 conservative analysis, so I'm understanding, when you
 - 20 made that run and made that presentation to the Minnesota
 - 21 PUC you were showing a cost to your customers, cost to
 - 22 the system, of somewhere between 64 and 140 million; is
 - 23 that correct?
 - 24 THE WITNESS: That's correct. On a
 - 25 present-value basis over a 25-year term, yes.

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should be extended or should they be replaced?

sorts of questions using a lot of the same kind of

And we proposed that we examine all of those

analysis we have here over the next several years to come

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additions.

information.

I presume that I would have probed the resource

planning group to see if they had produced any more

up with what's the potential impact of all thealternatives.

In the press response to yesterday's news, what

I tried to communicate was that these are very important
issues. They have the potential to have a significant
impact on our customers, regardless of which decision you
make, and we need to be very careful about how we examine
the alternatives and what their real impacts will be.

And that's the purpose of the resource planning process is to set the stage for those kinds of decisions.

And so that's what we intend to do, and that's what we've tried to do here as well.

CHAIRMAN NELSON: Thank you. The last question -- and this goes to your surrebuttal testimony. On pages 11 and 12 the question was asked has the company calculated the benefits that should be transferred away from South Dakota customers if 30 percent of the costs are disallowed? And I'm very intrigued by your answer here. If you could just expound on this. And obviously I'm going to ask the other side the same question. But this to me seems to be a pretty key issue here, for me anyway, if you could just expound on this.

THE WITNESS: The way in which we have treated
all of our power plant resources is to allocate the cost
of those power plants and the energy they produce across

all of our customer base across the five states we serve.

And so for Nobles approximately 5 percent of the cost of the project is allocated to the South Dakota customer base. And so if one jurisdiction says, well, I'm not going to pay for 30 percent of my 5 percent, that in essence is communicating that somebody else needs to pay for that resource and, therefore, the energy coming from Nobles that South Dakota hasn't accepted.

And so we went through a calculation to identify what would the cost of, if you will, replacement energy be if that 30 percent of 5 percent isn't accepted by South Dakota and looked at the incremental cost of energy on our system, which is close to the MISO LNPs or clearing prices, what the cost of that replacement energy would be. And that was one component of that analysis. What would we provide South Dakota in lieu of energy from the Nobles Wind Farm.

Customers also have the opportunity to receive the benefit of any renewable energy credits associated with the energy that they purchase. So we provided an estimate of I think it was 88 cents of renewable energy credit and accounted for that as well in the analysis.

Furthermore, there's the production tax credits
that are received by energy production at the Nobles Wind
Farm. And when you gross that up for the revenue

2 it amounts to about 3.7 cents a kilowatt hour, I believe.3 And accounted for that in the analysis.

requirement associated with that production tax credit,

And so if you look at all of those components, add them up, the cost associated with replacing the power from the Nobles Wind Farm due to a disallowance would probably exceed the proposed disallowance.

8 CHAIRMAN NELSON: And so it would be foolish for9 this Commission to go down that route, in your opinion;10 is that correct?

THE WITNESS: In my mind it's just a fourth look
at the potential benefits associated with the Nobles
project that that incremental analysis also in essence
tries to capture.

CHAIRMAN NELSON: Okay. Thank you. That is all I have for questions.

17 MR. SMITH: Other Commissioner questions?18 Commissioner Fiegen.

19 COMMISSIONER FIEGEN: Some of the questions have20 already been answered but I may ask you a little bit more21 detail on those.

First of all, on page 14 of your rebuttal you talk about a .11 percent, slightly increase in your conservative model. Could you explain that a little bit more, that .11 slight increase.

THE WITNESS: Excuse me, Commissioner. Yeah.
 That's the -- that's to put the numbers in perspective in
 the table that Commissioner Nelson and I were referring
 to.

The 100 some million dollar cost associated with
Nobles in that table is relative to the total cost of
operating the system over that same time frame. And so
that 100 -- I'm sorry. I should get the numbers right.

The 64 to \$140 million potential cost that was
identified in the conservative analysis is .11 percent of
the total operating cost of the system. Present value of
the total operating cost of the system.

So while these individual numbers look big, on a percentage basis of the total cost of operating the system they're relatively small increments. That's not to say they're insignificant. I'm not trying to suggest that. But it's just a very large system that we're operating here.

COMMISSIONER FIEGEN: Commissioner Nelson was asking you about the question -- just his last question on the additional costs it would cost consumers if we disallow it.

And this morning I thought you said it would cost consumers, and then for Commissioner Nelson you just said it would probably cost South Dakota consumers more.

into the future. Okay. And so if we had used today's

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modeling, this system of modeling? If it was taken from

173 175 1 1 forecast instead of what was known in 2008, I suspect COMMISSIONER HANSON: But there are ancillary 2 2 that the no CO2 alternative would not have shown a costs for lease payments and crop damage. 3 benefit. I don't know precisely what the difference THE WITNESS: Most of those are fixed costs that 4 4 would be, but since the no CO2 benefit is only 4 million are part of the capitalized project, and so the -- since 5 on a present-value basis, I suspect that number would 5 there is no fuel cost, per se, the O and M associated 6 6 have gone negative. with the project is very minimal. 7 7 But I don't know what the impact of the CO2 COMMISSIONER HANSON: Thank you. When this was 8 8 analyses would have been. Okay? submitted to I'll say Minnesota because I'm not sure how 9 9 However, if you look at the replacement energy many agencies you have to work with in Minnesota, the 10 10 analysis we've done that I was exploring with the other cost used in the modeling did not include a number of 11 Commissioners, that does not rely on natural gas prices, 11 associated costs on the premise that these costs were --12 per se. That shows that in the near term there is net 12 and I'm quoting from that same document. That they did 13 13 benefit associated with the project compared to not include the associated costs of payments to 14 replacement energy and lost benefits, at today's gas 14 landowners, compensation for crop damage, sales tax, 15 15 prices. builders risk insurance, transmission, interconnection, 16 16 Now whether the benefits will remain into the and similar items because these same costs would have 17 future will depend on what those gas prices do in the 17 been incurred by a competing project. 18 18 future to replacement energy costs. And so if you look If I'm buying a car, comparing one car to the 19 at the two of them, I think you come up with a judgment 19 next, it would upset me if one dealer did not include the 20 20 that it may be a close call but there is potential for tires because they're included in all cars or the 21 21 benefit. transmission or whatever. And that may be a lousy 22 22 COMMISSIONER HANSON: I have to be careful here. analogy, but that statement seems to beg that analogy. 23 23 I have some questions that I would not expect you to be Can you help me with that? 24 24 able to answer. Not that you're not -- but they have to THE WITNESS: Yeah. It deserves more context. 25 25 do with legal issues so I have to be careful as I'm When we selected the developer for the Nobles Wind 174 176 1 1 flipping through here. Project, enXco, the arrangement was that the -- for the 2 Jumping back just for a second when we were price that we would pay them they would cover the 3 3 talking about the -- if I may say pooling of all of the majority of the cost associated with developing the 4 capacity for a determination of what figures to use for 4 project. 5 5 CO2. Have any of those units been retired that were used And there were some costs enumerated there that 6 6 for that -- in that pool? as the project developed we chose to cover ourselves 7 7 And if you don't recall, just -instead of having the developer do them. There were also 8 8 some costs, for example, oversight costs by our engineers THE WITNESS: No. I have to think through the 9 timing. Not to date, no. But the model reflects 9 to ensure that enXco was building the power plant the way 10 10 retiring two additional units at Black Dog in the they said they would. 11 11 2015-2016 time frame. Very prudent to make sure that we're going to 12 12 COMMISSIONER HANSON: The modeling included get the product we bargained for from our developer so 13 13 that? that we can deliver the -- whatever benefits are 14 THE WITNESS: Yes. 14 associated with that to our customers. 15 15 COMMISSIONER HANSON: Okay. Thank you. So there was some company oversight that was 16 16 In examining the cost of -- and working to required. 17 17 justify the cost, the brief that was prepared I believe With regard to landowner payments imbedded in 18 18 it was June 6 by Ms. Valley states that the benefits of our arrangement with enXco were assumptions about how 19 Nobles is that it provides free energy. 19 many landowners would take annual payments for their 20 20 There are some costs to this energy, are there leases and how many landowners would take -- would 21 21 not? instead prefer one time up front payments. 22 THE WITNESS: There are some variable O and M 22 And as the project developed the ratio of those 23 23 costs. So it is not precise to say free. I think the two changed and so we chose to cover the difference. 24 notion is that there are traditional fuel costs and the 24 And there were other elements like that that 25 wind is free. 25 affected the cost and the interaction under the contract

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like.

various types of resources on our system if you would

I should ask. I'm appreciative of everyone else's time.

COMMISSIONER HANSON: I would. Thank you.

I don't know how many of my curiosity questions

Do you know how much spending reserve you have

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buildout occurs.

decline substantially as the CapX2020 transmission

serve to provide greater capacity on the transmission

system that will reduce curtailment.

In part those measured transmission facilities

Some of the curtailment that has occurred in

available at any particular time because of the amount of wind capacity that is available?

3 THE WITNESS: Commissioner Hanson, I don't know 4 the exact number, no.

COMMISSIONER HANSON: If there is a number, I would appreciate receiving that too. I probably have some impertinent questions to ask too but I'm going to refrain from asking those. Thank you very much, Mr. Smith.

10 MR. SMITH: Any additional Commissioner advisor 11 questions?

MR. RISLOV: Yes. Hello. I was looking at your rebuttal testimony on page 4, and I have line 12 through 17 listed. If you could review those lines.

15 THE WITNESS: I'm there, yes.

16 MR. RISLOV: Excuse me. I've got to refocus.

17 They're lines 19 through 21.

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18 THE WITNESS: Uh-huh.

MR. RISLOV: Lines 19 through 21. And my question would be -- and I understand your point but my question would be this: Although it -- it may be that one should consider the integrated system concept, and I think that's what you're suggesting there, states carving

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24 out, that type of thing, but there's also a

25 responsibility of states to review activities of other

states when those may not serve integrated system concept

but may be serving a specific interest in that state 3 whether it be legislative or otherwise. Wouldn't that be

4 the case?

5 THE WITNESS: In general, I agree.

6 MR. RISLOV: And so I guess that's just the

7 point. I don't think -- I think South Dakota would

8 perhaps be dilatory in its review if it didn't consider

9 the integrated system concept and consider the welfare of

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the system as a whole, and I guess I just wanted your 11 assent on that point.

12 THE WITNESS: Mr. Rislov, I generally agree with 13 you. The difficulty always is how do you parse the 14 components of that integrated system. There's lots of

15 benefits that come to all associated with components. 16

There's lots of state policies that require us to incorporate cost into that integrated system, picking and choosing pieces of other becomes a slippery slope.

19 MR. RISLOV: And I think there's an effort to 20 try to be fair and sometimes that can be difficult for

the company and the Commission, would you agree? 21

THE WITNESS: I do. 22

MR. RISLOV: As you know, I've been here maybe

24 way too long, but I think there's a notion that while we

25 haven't had a chance to really review these things as we 1 are today in a rate case setting so this is maybe a first

look at events that have occurred since 1992 and there

3 have been quite a few that have relied upon the

4 legislative requirements of the State of Minnesota.

5 Wouldn't you agree?

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6 THE WITNESS: I think that's fair, yes.

7 MR. RISLOV: And a lot of questions had to be 8 answered by both Staff and Commissioners in that period 9 of time when the windmills stopped at the border of

10 Minnesota and South Dakota.

11 So I guess my point is I don't think asking hard 12 questions at this point is necessarily trying to trash 13 the integrated system concept as much as it is trying to 14 seek answers that undoubtedly will be I guess a reason 15 for question for the public in South Dakota. And that's 16 how I look at it. Not so much a -- you know, an unfair 17 examination but just trying to get good answers that 18 perhaps we haven't been able to get in the last 20 years, 19 I suppose.

THE WITNESS: Mr. Rislov, I appreciate that perspective. We want to work hard with you whether it's 22 in a rate case setting or any other less formal setting to get you the information you need to help work through those kinds of questions.

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25 MR. RISLOV: On the other hand, I'm not

1 encouraging more rate case filings. That would be

2 mistaken.

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3 I'm looking at page 9 now of that same rebuttal 4 testimony. At least trying to look at it. And I have a 5 question on exactly what your process was in the

6 strategist modeling for including wind in the model.

7 I'm somewhat confused because you've talked 8 about integrating 2,000 megawatts and adding this on and 9 I'm just curious exactly how that process works and why

10 you did it that way.

And I gave you the wrong cite again. I'm sorry.

12 THE WITNESS: That's all right. The modeling 13 effort was addressing the question what would be the 14 impact of adding 2,200 megawatts of wind power to our 15 system over the -- between now and -- or between 2008 and 2020. 16

17 MR. RISLOV: Could I interrupt a second. Does 18 2,200 represent your 25 percent requirement?

THE WITNESS: It represents the aggregate of the requirements of all of the state jurisdictions. So I think it was about 29 percent.

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22 MR. RISLOV: Thank you.

THE WITNESS: For a system aggregate number.

24 And so we added 2,000 megawatts of wind power to this

25 system, and then we added the Nobles -- or 2,000 and then

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we added the 200 megawatts associated with Nobles to this system in the modeling simulation.

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The model is set up so that as we describe, it dispatches the Nobles project in that circumstance last. And so it dispatches all of the other generation on our system, and then to cover whatever the last amount of energy needed it dispatches Nobles. And "dispatch" is not quite the right term. It does not dispatch per se since wind power is an intermittent resource and you have to accept the energy when it's produced. But that energy offset generation after energy was offset by all of the other wind power that was included in the model.

So that's the analysis that was done under that conservative approach.

MR. RISLOV: And I understand why that would be conservative. But it confuses me in a sense with regard to this particular issue and this rate case.

You've stated I think a number of times today in answer to questions that you look at this on a stand-alone basis, next facility type of way, which I would assume is the normal. Yet, you gave Staff and the Commission a look at something that from my point of view doesn't look at all like that.

24 Would you agree that maybe confuses the issue? 25 THE WITNESS: It's a unfortunate omission on our

part absolutely and I apologize. Had I known that resource -- that incremental analysis was available, I would have included it.

MR. RISLOV: I for one and I don't know if it's available but it would be very interesting to look at the results if it were done on the next unit added to the system and whatever changes that would make.

THE WITNESS: Well, that's the analysis we -the second scenario is what we presented.

10 MR. RISLOV: It's still not entirely clear to me 11 because of the numbers that were discussed with Staff's 12 witness. I'm having a difficult time pulling out numbers 13 that if one's going to do an analysis and put a number in 14 the order, is it entirely clear that we have a complete 15 picture? And I'm trying to meld your testimony with 16 Staff's witness testimony. And I don't know if it's 17 entirely clear to me if I've reached that conclusion. 18 Perhaps I need a simpler document doing that comparison. 19 In a sense I'm making a request. And if you think it's 20 complete enough the way it's filed then fine. I could

21 live with that. 22 THE WITNESS: Mr. Rislov, we could provide you 23 with whatever other sensitivity testing that was done as 24 part of that second analysis, but that in one sense is 25 more complicated.

What we tried to do is boil down -- select the analysis that demonstrated that based on this incremental approach there's actually potential benefit. So in one sense we've presented you with a simple approach.

5 We can provide additional discussion of how the 6 modeling works and what it captures if that would help.

7 MR. RISLOV: Thank you. I've read your 8 testimony -- and maybe I should answer your question. 9 Any additional information on that second run would be 10 appreciated. I realize that it wouldn't give Staff a 11 chance to comment on it, but perhaps a bit more 12 clarification wouldn't hurt for understanding of some 13 sort. And I can't tell you specifically what that would 14 be. I'm just trying to think of, you know, when I leave 15 work next week, say on Friday, I would like to have a 16 little bit better understanding of some of the nuances 17 than what I do right now.

THE WITNESS: Be happy to provide additional information on that strategist work.

MR. RISLOV: I know in your surrebuttal you dealt with Staff's witness's criticism related to the running PROMOD or any other production cost modeling run for -- you know, on an annual basis. And I believe your testimony was that effectively your strategist model run took care of those issues; is that correct?

1 THE WITNESS: That's correct.

> 2 MR. RISLOV: And I'm just a bit curious. What 3 was the basis for -- or what have you used as the basis 4 in your strategist model that would essentially mimic what the PROMOD run would do?

THE WITNESS: We came up with an estimate of what we call integration costs, which in essence are the marginal operating costs that the Staff identified in their testimony that would be captured by the PROMOD model, the hour to hour or whatever period of time to whatever period of time. Changes in the system and how the impact on cost associated with those changes would add up.

So what we did is we used the PROMOD model to simulate the operation of the system over days or weeks and sampled various different periods during the year and ran the PROMOD model over a day or so in each of those different periods of time during the year to capture a low demand period of time, to capture a peak demand period of time, to capture a high wind power production period of time, et cetera.

21 22 And we used the PROMOD model to do that and came 23 up with a -- a number that represents the average 24 incremental cost of operating the system when wind power 25 is being received.

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And so we actually accounted for the kinds of issues Staff identifies that could be accounted for more precisely in PROMOD by running PROMOD. And then incorporating that number on a per megawatt hour of wind-produced basis into the strategist model.

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So we told the model anytime a megawatt hour of wind power is produced and the price is whatever it is, add this integration cost to reflect how the rest of the system has to compensate for wind.

MR. RISLOV: Has any Commission looked at what you've done, inserting those PROMOD results in the strategist model and approved that method that you've used or approved the numbers you've used?

THE WITNESS: Minnesota jurisdiction Department of Commerce has their own strategist model and does their own analysis. And through an exchange of discovery and early wind power and resource plan proceedings they became comfortable with the approach.

19 MR. RISLOV: Did North Dakota look at that as 20 well?

21 THE WITNESS: Not in detail.

MR. RISLOV: I've seen your suggestion on how
to, I'll use the phrase "deal with" Staff's witness
testimony on the value of Nobles that should be included

25 in the South Dakota cost of service and the suggestions

you make that would effectively reduce the output of

Nobles that would be available for South Dakota.

I guess I had a question on that. If you actually performed those adjustments, wouldn't that require a like adjustment by Staff if we follow the philosophy they used in making their original adjustment which in turn would cause you to make another adjustment to further reduce it? In other words, wouldn't it just take it to 0 if we followed your recommendation and then

allowed Staff to make another adjustment to reflect yourreduced output available for South Dakota?

THE WITNESS: I don't understand why that would be necessary or be the result. We were simply trying to identify how you would approach the disallowance.

MR. RISLOV: Maybe I could restate it so it's clear. I don't recall Staff saying that they would recommend reducing Nobles' output available on an integrated system concept for South Dakota.

I took Staff's recommendation to justifyreducing the cost included in the cost of service. Isthat your understanding?

THE WITNESS: Yes. And then just be one step further, which is if that's the basis for your

24 disallowance, we would seek recovery from another

25 jurisdiction, and it would follow then that if another

jurisdiction pays for that energy from the portion that
 was disallowed in South Dakota, it ought to receive the
 benefits.

MR. RISLOV: But if you did that, you would be
ostensibly reducing the Nobles output available for
South Dakota, wouldn't you?

THE WITNESS: Well, it's an integrated system,
and the electrons don't distinguish themselves, you know.
So from a system perspective it's not meaningful to save
the electricity available from Nobles. It's a cost

the electricity available from Nobles. It's a costallocation issue.

MR. RISLOV: But then once you do that, then Staff would have to further reduce the cost assigned to South Dakota because the production was lowered supposedly -- the cost related to that production would change; isn't that correct?

17 THE WITNESS: I'm not intimately familiar with18 the accounting associated with that so I --

MR. RISLOV: Well, maybe I -- excuse me. I
shouldn't have talked over you again. Maybe I should ask
that question of Staff's witness instead. That might be
a better way to go about it.

Just one last question. Although Xcel is a very large company and South Dakota is a relatively small share of Xcel, approximately 5 percent of Xcel, Xcel is a

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1 very large utility in South Dakota, isn't it?

THE WITNESS: I hope you view us that way, yes.

MR. RISLOV: And so, again, concern about Xcel
is a fairly large issue in South Dakota simply because it
does operate in a very large population center so concern
about Xcel in South Dakota is I would say in like manner

7 is very large as well. Would you agree?

8 THE WITNESS: Yes, sir.

9 MR. RISLOV: Thank you.

10 MR. SMITH: Commissioner Hanson, did you have

11 another question?

12 COMMISSIONER HANSON: Mr. Rislov is done, yes.

13 Mr. Alders, it just occurred to me I'm curious what

14 percentage of variable generation is Xcel able to

15 comfortably integrate?

THE WITNESS: It's a good question that probably

17 doesn't have an answer.

18 COMMISSIONER HANSON: Probably find out if they19 were not able to integrate it certainly.

THE WITNESS: The engineers have expressed
concern about our ability to integrate intermittent
resources like wind power. As we have gained more
experience, some of that concern has declined. As we

24 have increased ties to the rest of the MISO system, our

25 ability to manage intermittent resources has increased.

1 At this point in time I don't think anybody 2 knows ultimately how much intermittent resource can be 3 handled by the system. Whether people are comfortable 4 with this, we aren't close to that threshold, whatever it 5 6 COMMISSIONER HANSON: So at the present time 7 you're able to integrate 13 percent? Or what percentage 8 do you have that you're --

THE WITNESS: Right now we're at 13 to 14 percent and we're not encountering any significant

integration issues. COMMISSIONER HANSON: And you're not aware of 13 any analysis that shows a challenging point?

THE WITNESS: That's where I struggle. I'm not aware of such an analysis.

16 COMMISSIONER HANSON: Thank you. 17 MR. SMITH: I have one question, if I might, and 18 it's just -- just to be clear here, the only portion of

19 that totality of renewable energy that you included in

20 the model that was sent to Minnesota, presented in 21 Minnesota, that you're asking for a prudency and

22 inclusion in rate recovery for is just the Nobles plant

23 on an incremental basis? That's all you're asking for in

24 this case.

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THE WITNESS: Mr. Smith, the only reason I

hesitate is all of our wind power that comes through

3 clearly are not included in the rate case.

4 And I believe our other company-owned resource 5

power purchases goes through our fuel costs so those

Grand Meadow is already in rates. So I think the answer to your question is yes but I don't know the details.

7 MR. SMITH: My point was, though, we're not here 8 today to make a preprudency determination on another

9 2,000 megawatts of wind energy.

10 THE WITNESS: Absolutely not.

MR. SMITH: Okay. Thank you. Ms. Valley, did you want to proceed now or should we take a break, give

13 Cheri a rest? Unless it's going to be short.

14 MS. VALLEY: It is short but whichever you

15 prefer.

16 MR. SMITH: We'll reconvene at approximately 25

17 to.

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18 (A short recess is taken)

19 MR. SMITH: I'm going to call the hearing back 20 to order after recess. And we will then turn to Xcel for 21 your redirect.

22 MS. VALLEY: Thank you, Mr. Smith. I just have 23 a few limited questions for Mr. Alders.

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2 BY MS. VALLEY:

3 **Q.** Mr. Alders, if you could go to page 16 of your

rebuttal testimony, table 1. And is that incremental 4

analysis presented the result of adding Nobles based on

6 what was on the system at the time Nobles was going to be

added?

8 A. Not quite. Just if I overcomplicate this, let me

9 know.

10 The strategist model has existing power plant 11 resources, and then it -- the model itself adds

12 additional power plants when it's necessary to meet the

13 growing demand for electricity. And so the model has

14 existing resources and the resources that are selected by

15 the model to meet future demand growth.

16 But the incremental analysis did not include any

17 future wind resources, other than testing Nobles.

18 **Q.** And if -- in the future if an additional resource is

19 added, be it a renewable resource or other resource, will

20 that incremental analysis be conducted in the same way?

21 Looking at the incremental effect of that resource in

22 that time frame?

23 A. Yes.

24 **Q.** So the cost-effectiveness of that resource would be

25 impacted by what was already on the system.

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A. The cost-effectiveness of the resource would be

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affected by what's already on the system and what -- the

3 resource -- what its competition or alternatives are.

Q. Okay. And just following up on your response here

and the question of Mr. Smith, are any future

6 wind-compliance costs at issue in this case?

7 Α.

8 **Q.** Now what I'd like to refer you to now is Ms. Maini's

9 April 16 testimony Exhibit 1.

10 A. I'm there.

11 Q. Okay. And if you could go to what is identified on

12 the document itself as page 6. And it would -- on the

13 page numbering for the exhibit it's page 28 of 67.

14 A. I'm there.

15 **Q.** Okay. And on the section entitled "Overview of

16 Filing" I'd like to refer you there -- and Mr. Soye had

17 referenced the fact that this was filed in Minnesota and

18 indicated that Nobles in this Petition would be used to

19 satisfy the Minnesota renewable requirement; is that

20 correct?

21 A. Yes.

22 **Q.** And in that paragraph there does it also convey to

23 the Minnesota Commission that this would be used to

24 satisfy the renewables objectives and standards in other

25 iurisdictions as well?

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1	A. Yes.	1	MS. VALLEY: Thank you. No.
2	Q. And, Mr. Alders, is Nobles currently being used to	2	MR. SMITH: You may step down then, Mr. Alders.
3	serve South Dakota customers?	3	Thank you very much.
4	A. It's part of our integrated system that serves all	4	You may call your next witness, Xcel.
5	of our customers, yes.	5	MS. VALLEY: We do not have another witness for
6	MS. VALLEY: Okay. Thank you, Mr. Alders. No	6	this issue. Thank you.
7	further questions.	7	MR. SMITH: Thank you. Then with that, Mr.
8	MR. SMITH: Well, I think we're done. And	8	Soye, are you prepared at this time to commence?
9	Mr. Alders unless do you have anything in response to	9	MR. SOYE: I believe we are. So Staff would
10	Commissioner questions, Staff?	10	call its witness Kavita Maini to the stand.
11	MR. SOYE: Yes. I believe we do. Just one or	11	KAVITA MAINI,
12	two questions in response to what was asked.	12	called as a witness, being first duly sworn in the above
13	RECROSS-EXAMINATION	13	cause, testified under oath as follows:
14	BY MR. SOYE:	14	DIRECT EXAMINATION
15	Q. I believe it was a question Mr. Rislov had asked or	15	BY MR. SOYE:
16	maybe it was Commissioner Hanson. I'm sorry. I don't	16	Q. Kavita, could you please state your name and spell
17	recall. But we were talking about the additional wind	17	it for the record.
18	over the time period that you've identified I believe it	18	A. I sure can. It's Kavita Maini, K-A-V-I-T-A, last
19	was through 2020. Under the conservative modeling	19	name M as in Michael A-I-N-I.
20	approach, and maybe this is just for our understanding,	20	Q. And what is your current business address?
21	at what increments, and by "increments" I say the levels	21	A. 961 North Lost Woods Road, Oconomowoc, Wisconsin
22	in megawatts and the years that they're added do you know	22	53066.
23	the frequency in volume at which these increments are	23	Q. And how are you currently employed?
24	added?	24	A. I'm an independent consultant and the sole owner of
25	A. The increments that we've included in our modeling	25	KM Energy Consulting, LLC.
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1	have typically been 100 megawatts. I'm not certain about	1	Q. Did you cause in this case to be filed prefiled
2	the timing. As I vaguely recall, our modeling in this	2	direct testimony?
3	2008 time frame typically looked at adding 100 megawatts	3	A. Yes, I did.
4	annually. But I'm not certain about that.	4	Q. And could you please direct your attention to
5	Q. Okay. And I believe it was Mr. Rislov's questions	5	Staff's Exhibit 1?
6	on the integrated resource planning approach that just	6	A. Yes.
7	brings up the idea that is it Xcel's opinion that	8	Q. Is this the direct prefiled testimony you reference?A. Yes.
8	South Dakota is responsible for 5 percent I believe was	9	Q. And if you were asked the same questions that were
10	the numbers used of the Minnesota Renewables Energy Standard?	10	asked of you in that document, would you answer them the
11	A. No. Not at all. No. I'm sorry if I left that	11	same today?
12	impression.	12	A. Yes, I would.
13	We acquire wind power to meet the policies of each	13	Q. Do you have any clarifications or corrections that
14	of the states we serve. We do not we do not if 100	14	you'd like to make of that testimony at this time?
15	megawatt hours of wind power is necessary to meet the	15	A. There is just one. There was a labeling error. I
16	Minnesota RES, 5 percent or 5 megawatt hours of that is	16	believe I called the \$17 a ton carbon case I called it
17	not "the responsibility of South Dakota."	17	\$17.50 and it was a labeling error. But there are no
18	The distinction is that we add resources to our	18	assumption or no other changes. But I just wanted to
19	system to meet the aggregate of the policies of the	19	make sure I was correct in identifying that.
20	states, and cost allocation then is based on the	20	Q. Okay. So it can be described as a clerical error,
21	rate-making allocators associated with our overall	21	not substantive. It changes nothing in your testimony?
22	system. South Dakota's not obligated for a portion of	22	A. That's correct.
23	the compliance.	23	Q. Okay. Thank you. Could you please provide the
24	MR. SOYE: No more questions. Thank you.	24	Commission with a summary of that direct testimony?
25	MR. SMITH: Any follow on, Xcel?	25	A. Sure. My direct testimony was basically divided
07/02	/2012 04:02:51 PM Page 197 to	200	

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1 into five sections.

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In the first section I describe my qualifications and educational background and the fact that I was testifying on behalf of Commission Staff regarding cost recovery associated with Xcel's Nobles Wind Project.

And then in the second section I basically describe briefly the Nobles Wind Project, that it began commercial operations in December 2010, and that Xcel had originally sought revenue requirement of 2.085 million that it needed adjusted and made it to 2.039 million to actually reflect the investment in place in 2011.

And in that same section I also just provide a brief summary of my conclusions.

In the third section I show the results of my analysis on a traditional deficiency perspective. And I conclude that Nobles was not built to satisfy energy or capacity needs.

And then in section 4 I further elaborate that Nobles was not built to comply with South Dakota's ROE either. And because as you heard earlier today too, Xcel was already had slightly surpassed South Dakota's ROE and was at 10.3 percent.

23 And further in this testimony I provide some 24 evidence and observations and it seemed pretty clear to 25 us that Nobles was actually being built to satisfy the

Minnesota RES. And the fact that Xcel sought a certificate of need extension on this basis. And if you look at the Petition, there are areas there where Xcel specifically identifies that it was building -- it was seeking approval of Nobles on the basis of compliance with the Minnesota RES standard.

Further down in that same section I also point out that in all the runs that Xcel included in that Minnesota Petition, in all the runs that were included there, the cost exceeded the benefits. And it's only at a \$30 a ton carbon price that the costs and benefits roughly break even.

In that one too the costs are slightly higher but it's coming close to a break-even point.

So looking at all of these factors, the fact -- and all these factors I just described, I concluded that we had enough justification to disallow cost recovery for Nobles on the basis of need. From a traditional needs perspective Xcel had not demonstrated that Nobles was a necessary resource.

So in section 5 then I go on to explain that not withstanding this foregoing conclusion I just described, we wanted to recognize the fuel and nonfuel benefits of Nobles. And so we used what we call this nontraditional method to calculate the percent disallowance.

1 So in order to do that we used the information filed 2

in the Minnesota Petition, and as I described earlier,

3 they were future -- they were scenarios presented at that

4 Minnesota Petition. And not withstanding the high

5 uncertainty that's associated with these long-range

forecasts, we gave Xcel the significant benefit of the doubt by relying on the scenarios presented forth in

R their Petition.

> And what we did was we used a two-step approach in calculating the disallowance methodology. In the first step we basically capped the amount to what was included in that Minnesota Petition when Xcel sought recovery of that plant.

14 I explained briefly in my testimony that because 15 Nobles was selected as part of a competitive bidding 16 process it stands to reason that they should be held to 17 that account, especially when you look at the fact that 18 the costs were exceeding benefits in all the scenarios 19 presented.

20 And, furthermore, that in PPA's, you know, such 21 costs don't get passed through.

And then in step 2 we utilized the \$4 a ton carbon assumption and looked at the cost benefit -- and looked at the extent -- I'm sorry. Looked at the amount of net cost, in other words, the amount by which the cost

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exceeded the benefits and divided that by the cost of the

Nobles project to determine the percentage disallowance

3 in the second step.

4 And so you use these two steps basically to then 5 recommend the percentage disallowance that we recommended 6 in the testimony.

7 And the additional thing -- additional factor I 8 point out in this section is that the revenue 9 requirements that we utilized here were based off of 10 the -- what Xcel had provided based on their specified 11 rate of return.

12 So in the event the Commission decides that a 13 different rate of return is more prudent, then I would 14 accordingly recommend that this revenue requirement be 15 adjusted before applying that percent disallowance.

16 **Q.** Thank you. I would also now point you -- excuse me.

17 Did you cause in this case to be filed rebuttal

18 testimony?

19 A. Yes, I did.

20 **Q.** And could you direct your attention to Staff's

21 Exhibit 2?

22 A. Yep.

23 Q. Is that your prefiled rebuttal testimony?

24 A. Yes.

25 Q. And if you were asked the same questions as you were

- 1 in that document today, would you answer them the same?
- 2 A. Yes.
- **Q.** Do you have any clarifications or corrections?
- 4 A. No, I do not.
- 5 Q. And now could you please provide the Commission a
- 6 brief summary of that document as well?
- 7 I sure can.

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8 In the rebuttal testimony it's a four section -- it

9 has four sections. And in this rebuttal testimony area

10 we basically felt compelled to respond to Xcel's rebuttal

11 because there was a lot of new information that we had

12 not been privy to before that we needed to respond to.

13 We also wanted to rebut some of Witness Alders'

14 arguments and also to clarify our position.

15 And in section 2 then I go on to describe my first

16 main area of disagreement. And this -- in this

section -- and you already heard this from Witness Alders

18 but I differentiate utilizing the concept of an

19 integrated system approach when one is looking at need

20 versus when one is looking at policy.

And I further describe that from a needs perspective

I generally support the concept of an integrated resource

23 plan because you look at the integrated system, you

24 figure out what your needs are, you look at what your --

25 on the other side what your resources are to meet this

- 1 need. Then you figure out what the cost-effective --
- then the next step is you look at, you know, what the
- 3 deficiency is, what the next cost-effective resource is,
- 4 and provided it is a, you know, prudently built
- 5 alternative, there's economies-of-scales savings and
- 6 diversity savings when you're looking at this from a
- 7 needs perspective.
- 8 But then I go on to further explain and
- 9 differentiate that when you are looking at an integrated
- 10 system approach for setting renewal policy it is not
- 11 effective or efficient because all the states have
- 12 different renewable policies and you can't -- from the
- 13 way I present it in my testimony, you can't have one
- 14 jurisdiction subsidizing another jurisdiction in this
- 15 matter on a policy basis.

16 And I guess I go on to say that in order to

17 socialize these costs across all these jurisdictions that

18 the savings would have to be very significant, or put

19 another way the benefit-cost ratio would have to be

20 really high in order to justify that.

21 Xcel's cost-effective -- so then I go on to explain

22 that the cost-effectiveness measures that come out of

- 23 this integrated process, if you look at it in an
- 24 integrated way, the cost-effectiveness measures then are
- 25 also misleading because when you look at \$64 million from

- 1 Xcel's first run and you simply divide that, I mean,
- that's like a net cost and you divide that by the cost of
- 3 the entire plan, which is \$60 billion, .11 percent.
- 4 That's how, if you look at it from an integrated
- 5 perspective that's how it looks. And on a percentage
- 6 basis, it doesn't look very "significant."

7 Now but the fact of the matter is that the

8 cost-effectiveness of Nobles has to be looked at compared

9 to its benefits. And when you look at it from that

10 perspective, you look at the \$64 million and you divide

11 it by the cost to build Nobles, that's 13 percent.

12 That's significant. So I clarify that in my testimony.

13 So the way you look at it is not .11 percent but 13

14 percent.

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15 Then in section 3 I identify all the -- I identify 16 the limitations associated with the cost-benefit analysis presented by Witness Alders. And perhaps this is the

18 most important part of my rebuttal testimony.

19 I talk about the strategist model, which is a

20 capacity expansion model, a preliminary screening model

21 and not appropriate for addressing the -- not appropriate

22 for assessing economic energy savings, especially those

23 associated with wind. Wind is intermittent. I go on to

24 say. It's highly unpredictable. There are issues not

25 only with predicting wind on an inter and intraday basis

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1 and now we are looking at 25 years ahead? It's a highly

unpredictable resource.

3 And what -- I go on to explain what strategist does

4 is it smoothens out all that volatility. And once you

5 smoothen that volatility out there are errors associated

6 with that. And those errors basically get compounded

7 year over year.

8 And I provide examples -- an example in my testimony

where I just took the actual Nobles output and used

10 average -- used average MISO on- and off-peak prices

11 versus hourly prices. And I concluded through that

12 analysis that there's anywhere from a 7 to 10 percent

13 error just looking at that year alone when you compare

14 the savings on an hourly basis versus on an average

15 basis.

16 In other words, the savings are overestimated by

17 7 to 10 percent, depending on whether you look at do you

18 have locational marginal prices or real-time locational

19 marginal prices.

20 The important point I emphasize in my rebuttal is

21 that that's just one year. That was the point I was

22 trying to make is that's just one year. And as you go

23 year after year after year those years -- those errors

24 simply get compounded. And as those errors get

25 compounded your confidence band about -- you know, on

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those estimates basically gets wider and wider and it'simportant to remember that those don't get recognized

! important to remember that those don't get recognized

8 even in a percent disallowance that we relied on, the 64

4 billion doesn't recognize the wide error band.

I also talk about in my testimony the new run and, you know, we've heard about that, the run a fair amount this morning. It's been established that it wasn't

8 provided to us before.9 But, you know, we

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But, you know, we have had very -- a lot of questions about it but the discovery period was passed by the time we got this. You know, we didn't get any work papers. And the same thing with the MISO forecast. The third run that they did with the MISO forecast. It's the wholesale market price forecast. What were the assumptions there on natural gas, on fuel? I mean, all

16 these forecasts rest on very important assumptions. 17 And furthermore, the MISO forecast scenario doesn't 18 really model MISO. Strategist does not model MISO. For 19 example, PROMOD would because PROMOD includes the 20 transmission system in there as well and its emulation of 21 the MISO market. But doing a spreadsheet analysis of the 22 MISO market, like looking at on- and off-peak which were 23 developed, I don't know how they were developed, what 24 assumptions were used and then comparing that with now 25 what you get, to me that's not a true way of assessing,

you know, a MISO real-life scenario.

2 In section 4 I finally talk about -- I tried to 3 clarify the whole disallowance methodology again and the 4 fact that we have accounted for all the costs and all the 5 benefits in our disallowance methodology.

6 So, you know, I'll just leave it at that. I just 7 clarified that.

And finally I talk about cost overruns and say that
they are not unusual and should have been included in
their -- in the Minnesota Petition to begin with.

11 Q. Thank you for that summary. And just for

12 clarification, I realized when I pointed you to Staff's

13 Exhibit 2 I was just pointing you to -- 1 and 2 are

14 public confidential versions of your prefiled direct

15 testimony but in response to my reference to your

16 prefiled rebuttal I realized that you knew what I was

premed resultar i realized that you knew what I was

17 talking about. But I just want to clarify are you

18 adopting the public and confidential versions of both

19 your prefiled direct and prefiled rebuttal which are

20 marked Staff's Exhibits 1, 2, 3, and 4?

21 A. Yes. I'm sorry. I should have noticed that. But

22 yeah. I saw my name there.

23 Q. No. That was me.

24 A. Yeah. There's 2 here. And 1.

25 Q. Thank you. And, Ms. Maini, I'm not sure if you were

1 present in the room yesterday for Mr. Copeland's

2 testimony, but if you were you would have noticed that

3 there was a few additional questions asked of him in

4 response to the surrebuttal testimony filed by certain

5 witnesses of Xcel. And if it's okay, I would like to ask

6 you just a few follow-up questions.

7 A. Sure thing. Sure.

8 Q. First of all, we've talked a lot about the second

9 modeling approach.

10 A. Yes.

11 Q. You were here for Mr. Alders' testimony. And I just

12 want to ask in his surrebuttal testimony he says you

13 dismiss without analysis the company's second strategist

14 modeling despite the fact that the second modeling is

15 consistent with your recommendation of a stand-alone

16 analysis.

17 Now that you've had more time to look at this second

18 modeling approach, do you believe that it conforms to

19 your recommendation of a stand-alone analysis?

20 A. No, it does not.

21 Q. And why?

22 A. A couple of things. First, when I talked about

23 stand-alone I was just trying to demonstrate the

24 misleading cost-effectiveness measure used by Xcel. I

25 was talking about what I just finished saying in my

1 summary, which is the -- that the -- in order to look at

2 the most appropriate cost-effectiveness measure it's

3 appropriate to look at the net cost in this case, for

4 example, in the first strategist run it would be the 64

5 million divided by the cost of Nobles.

6 That's all I was trying to say is what's that

7 yardstick? What's the cost-effectiveness measure? And

8 from our perspective, that's the cost-effectiveness

9 measure and not 64 million which is the net cost over the

10 entire \$60 million plan.

11 Q. Just for clarification, you said "\$60 million plan."

12 I assume you're referencing the prior number you've

13 stated which is 60 billion?

14 A. Yeah. I said 60 billion. I'm sorry.

15 Q. Thank you. On page 5 of Mr. Alders' testimony, the

16 first full paragraph he talks about the wind integration

17 costs, and this issue was also raised with -- after

18 Commissioner questions.

19 Do you feel that the wind integration costs pick up

20 some of those modeling confidence issues, some of those

21 errors? Do you believe that this integrated -- excuse

22 me. Let me start over, please.

On this page they're talking about the wind

24 integration costs that were included in the conservative

25 modeling approach.

- 1 A. Okay.
- 2 **Q.** And you have talked about the error that's present
- in these modeling approaches and that their modeling
- 4 doesn't recognize these errors.
- 5 Here Mr. Alders is talking about, you know, well, we
- 6 included these costs to account for some of these
- 7 nuances. Do you believe that these integration costs
- 8 remedy those errors, those potential errors?
- 9 A. No, I don't.
- 10 **Q.** And can you explain why?
- 11 Α. Because the integration costs are just one piece,
- 12 one input that goes into the model. When I talk about
- 13 the error bands I'm basically talking about smoothening
- 14 out all the errors, for example, associated with the wind
- 15 output.
- 16 Wind is so intermittent. It can, you know, be 0
- 17 megawatts at one end and go to the other end and -- like
- 18 I said, there's so much unpredictability on an intra and
- 19 interday basis.
- 20 So when I am talking about that error, the
- 21 integration costs do not address those kinds of errors.
- 22 Those errors simply get compounded. And as I said, that
- 23 error band just keeps getting wider as the further out
- 24 you go in time.
- 25 Q. Okay. So let me be sure I'm understanding your
- 1 question. Are you saying it's because of the model being
- used that these errors are not fixed and not necessarily
- 3 the use of integration costs?
- 4 A. That's absolutely right. That's absolutely right.
- 5 Because the model smoothes out all the volatility that's
- 6 inherent in wind or, you know, some of the other input
- 7 assumptions, for example natural gas and so on, because
- 8 strategist smoothens that out, just putting those
- 9 integration costs in is not going to address the
- 10 fundamental problem, which is that model is smoothening
- 11 out all the errors.
- 12 And you need another model that looks at that
- 13 hour-by-hour volatility, recognizes it, and is more
- 14 appropriate than a model that's just an initial screening
- 15 model used for planning.
- 16 That's not the model to be using for evaluating the
- 17 cost-effectiveness of the resource.
- 18 **Q.** Okay. And stepping off of that question, you say
- 19 you need this more intricate model. But in the
- 20 surrebuttal testimony Mr. Alders says PROMOD is only used
- 21 to simulate one year, the current year, a future year,
- 22 and since we're all very unfamiliar with these modeling
- 23 programs, you have said that it can be used for this and
- 24 Mr. Alders says, well, that's limited to a year.
- 25 So please explain do you agree that this is only

- 1 appropriate to assess a year's worth of activity, or can
- 2 it be used in the long-term?
- 3 A. Well, it can be used in the long-term. The smart
- way to do PROMOD is to not run year after year after
- 5 year. Because it is a time-consuming exercise because
- 6 there's so much data involved.
- 7 But the way it's typically done is you look at it in
- 8 every four or five or some defined increments. So let's
- 9 say, you know, I did my strategist runs. Now I want to
- 10 validate whether a specific resource is cost-effective or
- 11 not.
- 12 I would take PROMOD and I would run that in 13 every-five-year increments to see what happens. That's
- 14 what MISO does on a routine basis. When they're doing
- 15 transmission planning, that's what they do. They look at
- 16 PROMOD every-five-year increments to figure out in more
- 17 greater detail whether it's cost-effective or not.
- 18 **Q.** And if something is cost-effective, I mean, how do
- 19 you determine if something is cost-effective? You used
- 20 the term "significant." Must show significant benefits
- 21 over cost. Significant is a rather open term.
- 22 A. That's true. It's an open term. Now what I would
- 23 consider significant, once again I can use a MISO
- 24 example. Around the time that Nobles was being
- 25 contemplated MISO had what's called the reg B 2

 - methodology for cost allocation. And that's basically
- 2 for economic projects.
- 3 And the way they had developed that benefits-cost
- 4 threshold is basically like this: They said the further
- out the in-service date, the higher the benefit-cost
- 6 threshold.

- 7 So imagine that you're looking at time on -- and I'm
- 8 drawing a horizontal line. And you have a straight line
- 9 running across from zero diagonally up and you have time
- 10 down here horizontally. And basically what it's saying
- 11 is the further out in time you go, the B-C ratio will be
- 12 high.
- 13 So in the MISO economic project criteria in year 1
- 14 your benefit-cost ratio is supposed to be 1.2. In year 2
- 15 it goes 1.4. If your in-service date is year 10, it's 3
- 16 to 1.
- 17 That's what I'm talking about when I say significant
- 18 benefit-cost threshold. And MISO did that because if you
- 19 want to socialize cost associated with economic projects
- 20 or policy projects, then the benefit-cost threshold
- 21 better be significant.
- 22 So when I say significant I mean something like 23
- 24
- MISO's benefit-cost threshold to economic projects. MR. SOYE: Thank you. One moment, please.
- 25 Q. And just to be clear, you are saying that you need

- 1 to show these significant cost-benefit ratios as in
- **2** benefits exceeding costs, not the other way around,
- **3** because of the uncertainty that's involved in this
- 4 modeling; correct?
- 5 A. Yeah. As I mentioned earlier, that as the further
- 6 out in time you go, the higher the uncertainty and the
- 7 comfort in these estimates.
- 8 And so another reason why entities like MISO have
- 9 these significant benefit-cost threshold was to recognize
- 10 that uncertainty and say that -- and that's why they set
- 11 these strong significant thresholds to cross. And --
- **12 Q.** Sorry. I'm multitasking.
- 13 A. No. That's okay. Did I answer your question?
- **14 Q.** Yes, you did.
- 15 A. Okay.
- MR. SOYE: At this time Staff would tender
- 17 Ms. Maini for cross-examination.
- **18** MR. SMITH: Xcel, please proceed.
- **19** MS. VALLEY: Thank you.
- 20 <u>CROSS-EXAMINATION</u>
- **21** BY MS. VALLEY:
- 22 Q. Good morning, Ms. Maini.
- 23 A. Good morning.
- **24 Q.** Is it your position that the company should be
- 25 allowed full cost recovery if Nobles' benefits exceed its
- 1 costs?
- 2 A. Yes. Provided that we had enough opportunity to
- 3 evaluate and ascertain the analysis and how it was
- 4 conducted.
- **5 Q.** And, Ms. Maini, if you recall the schedule in this
- 6 matter, we had initially had a schedule for direct
- 7 testimony and rebuttal testimony. Do you recall that?
- 8 A. Yeah. Meaning that it was earlier in the process?
- 9 Yes.
- 10 Q. And do you agree that we agreed to a modified
- 11 schedule to allow Staff the opportunity to respond to the
- 12 issues that were raised in our April 27 testimony?
- 13 A. I just want to make sure I am understanding your
- 14 question. So are you saying that the delay in the
- 15 process was so that we could get time to work on more
- 16 discovery, or is that what you're --
- 17 Q. Thank you for the question, Ms. Maini. I do want to
- 18 be clear.
- 19 That when Staff had received the rebuttal testimony
- 20 of the company there was the request to have an
- 21 opportunity to modify the schedule to include rebuttal
- 22 testimony for Staff.
- 23 A. Oh, I see what you're saying. So in order to give
- 24 us time to write rebuttal testimony?
- 25 Q. Right. The initial schedule didn't allow for --

- 1 A. Yeah. Yeah. I'm sorry I took so long to
- 2 understand you. Yes. Right.
- **3 Q.** Thank you. And do you recall that Mr. Alders
- 4 regretted the delay in providing this information to the
- 5 Staff

- 6 A. Yeah. But I guess that didn't change the fact that
- 7 we didn't have the run. But yeah. I do -- he has
- 8 mentioned that today too. Yeah.
- **9 Q.** Did Staff submit any discovery requests after the
- **10** receipt of testimony?
- 11 A. From my perspective, I thought that the discovery
- 12 process was over because it's my understanding that
- 13 there's a month for data responses and all we had to go
- 14 on was whatever we got. So I thought the discovery -- I
- 15 mean, from my perspective, all intents and purposes the
- 16 discovery process was over.
- **17 Q.** Now getting back to the testimony that we've been
- **18** discussing, when the company is proposing a new resource
- 19 and is comparing that new resource to alternatives,
- 20 including purchase power alternatives does the company
- 21 compare that resource against the expected lifetime of
- 22 those alternatives?
- 23 A. Could you please clarify your question some more?

A. So a resource such as new resources, like you're

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- **24 Q.** Does the company compare that resource against the
- **25** expected lifetime cost of the alternatives?
- - 2 talking about the long-term life of the --
 - **3 Q.** Yes.

- 4 A. Yes.
- **5 Q.** Okay. And when evaluating those future costs made
- **6** up in those forecasts, are those made at the time the
- **7** evaluation to invest in the project is being
- **8** contemplated? So are you basing it on the facts known at
- 9 the time?
- 10 A. Yes. Yes. Yes.
- 11 Q. And did your testimony compare Nobles' estimated
- **12** costs at the time the decision to invest was made to 2011
- **13** MISO replacement energy costs?
- 14 A. My primary analysis and methodology presented
- 15 focused on looking at the runs provided in the Minnesota
- 16 Petition to ascertain what the disallowance methodology
- 17 should be. That was the primary basis.
- **18 Q.** Were you -- when you did your price comparison to
- **19** MISO costs, however, were you using 2011 MISO energy
- 20 costs?
- 21 A. Are you talking about my rebuttal, the 7 and 10
- 22 percent analysis, or could you help me on --
- 23 Q. Sure. I apologize. Let me find that spot in the
- 24 testimony.
- 25 A. That's okay.

- **1 Q.** Correct. Yes. Page 8 of your rebuttal testimony.
- 2 A. Okay. Let me just make sure here. The 7 and the 10
- 3 percent. Okay.
- 4 This particular run -- I just want to make sure I
- 5 give you the right context about this and clarify.
- 6 This particular analysis where I show that I
- 7 overestimated the savings by 7 and 10 percent were
- 8 calculated using actual MISO prices. However, note how
- 9 I'm using these. I'm not saying that this is the error
- 10 and the cost benefit is based on this number.
- 11 What I'm trying to demonstrate here is to say there
- 12 are so many errors the saving estimates get overestimated
- 13 because of the way strategist does this.
- 14 When you start looking at averages because
- 15 strategist uses averages, when you look at these averages
- 16 and you compare with hourly, actual hourly data, you see
- 17 this overestimation of savings. So what I'm saying is
- 18 that in actuality -- I shouldn't even say actuality
- 19 because these are estimated numbers. But that the
- 20 difference between average MISO prices versus hourly MISO
- 21 prices I found that the average MISO prices run that
- 22 perhaps strategists would have used is overestimating
- 23 cost by 7 to 10 percent using this 2011 actual data.
- 24 That's all I was using -- that's all I was trying to
- 25 demonstrate here.

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- Did I help answer your question?
- 2 Q. Thank you, Ms. Maini. Yes.
- 3 A. Okay.

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- **4 Q.** And I appreciate the comparison in your use of
- **5** current MISO costs in contrast. Do you agree that the
- 6 company when it was conducting its analysis used
- 7 forecasted prices for MISO energy at the time the
- 8 decision to invest with Nobles was made?
- 9 A. Right. Yes.
- **10 Q.** And do you expect market energy prices in 2011 will
- 11 remain unchanged over the next 25 years?
- 12 A. No.
- **13 Q.** And moving on to your rebuttal testimony at page 6,
- 14 we can take a look there, do you agree that wind
- 15 energy -- that Nobles Wind Energy replaces the cost of
- 16 fuel that would have otherwise been consumed in the
- **17** production of generation from other resources that
- **18** already exist or would have been added regardless of the
- 19 addition of wind?
- 20 A. Are you looking at rebuttal or direct?
- **21 Q.** I had it on your rebuttal.
- 22 A. I thought I had that in my -- I think that's my
- 23 direct.
- **24 Q.** Okay. Right. Thank you, Ms. Maini. On lines 132
- **25** through 135.

- 1 A. And what was your question again? I'm sorry.
- **2 Q.** Thank you. Do you agree that Nobles wind energy
- **3** replaces the cost of fuel that would have otherwise been
- 4 consumed in the production of generation from other
- 5 resources that already exist or would have been added
- 6 regardless of the addition of wind?
- 7 A. Yes, I do.
- **8 Q.** Now you have, you know, compared the \$64 million
- **9** incremental -- or the cost -- difference in present-value
- 10 revenue requirements under the conservative analysis.
 - But do you agree that whether Nobles' costs exceed
- 12 its benefits should be determined based on actual system
- 13 operations forecast at the time the decision to invest in
- **14** Nobles was made?
- 15 A. Okay. There were too many things going on in this.
- 16 Can you just repeat this again?
- **17 Q.** Sure. Do you agree that whether Nobles' costs
- 18 exceed its benefits should be determined based on actual
- **19** system operations forecast at the time the decision was
- 20 made?

- 21 A. So are you basically -- I just want to make sure I'm
- 22 understanding your question correctly. So are you
- 23 basically still going back and asking me that the
- 24 decision to invest in Nobles should be based on what you
- 25 knew at the time you were thinking of investing in
- 1 Nobles? Is that what you're trying to get at?
 - **2 Q.** Based on actual system operations, yes.
 - 3 A. Based on actual system operations at the time you
 - 4 were contemplating Nobles?
 - **5 Q.** Yes.
 - 6 A. Yes. I mean, yeah. I agree. You have to be
 - 7 looking at it from that -- when you were there. Yeah.
 - 8 Right.
 - **9 Q.** And did the company's testimony state that its
 - 10 conservative strategist analysis assumed the existence of
 - 11 2,000 megawatts of wind generation that doesn't currently
 - **12** exist?
 - 13 A. So what are you asking me, that the 2,000 -- sorry.
 - **14** MS. VALLEY: Just a moment.
 - **15 Q.** I apologize if it's not clear. Ms. Maini, what I'm
 - 16 trying to ask you about is that you agree that the
 - 17 conservative analysis initially presented by the company
 - **18** assumed 2,000 megawatts of wind generation in advance of
 - 19 Nobles? Do you agree?
 - 20 A. Not quite. And here's the reason. Because just the
 - 21 way you phrased that question. I agree that in the first
 - 22 run there were 2,200 megawatts of wind added to that
 - 23 scenario. And then the way I understand it, in that run
 - 24 you had one scenario where you were -- you had the whole
 - 25 system with the 2,200 megawatts without Nobles and then

- 1 you had another run where you had the whole system with
- 2 the 2,200 megawatts and then with Nobles. That was the
- 3 run. That's how I understand the run.
- **4 Q.** In either case do you agree that that 2,000
- 5 additional megawatts beyond Nobles was not currently
- **6** being added to the system? Or I should say 2,000
- 7 megawatts?
- 8 A. That the 2,000 megawatts after Nobles was part of
- 9 the plan but not being added. That's the question;
- 10 right?
- 11 Q. Correct.
- 12 A. Okay. Yes. I realize that the 2,000 megawatts were
- 13 not being added. But I also want to point out that the
- 14 way the strategist modeling run was developed, it
- 15 takes -- the system is set up where it says minimize cost
- 16 subject to a number of constraints. And one of the
- 17 constraints was compliance with all the renewable
- 18 energies policies.
- 19 So the way the run was developed, my understanding,
- 20 is you have minimized costs subject to all of these
- 21 constraints, one of the constraints being the policy.
- 22 And so then the 2,200 megawatts is forced into the model
- 23 to comply with the policy, and that's my understanding of
- 24 it.
- **25 Q.** And you agree, though, that the additional 2,000
- **1** megawatts is not, in fact, being added.
- A. At the time the decision to construct Nobles was
- 3 being made those 2,000 megawatts were added to comply
- 4 with how the system would be to comply with the policies.
- 5 What was in the Petition is that Nobles was the
- 6 specific resource that was in question.
- 7 Q. Ms. Maini, do you agree that the
- 8 cost-benefit-comparison analysis of that additional 2,000
- **9** megawatts is not in front of the Commission today?
- 10 A. Right. That additional 2,000 megawatts, the cost
- 11 for those additional megawatts is not before the
- 12 Commission today. Correct.
- 13 Q. Okay. And just one more point. You had raised the
- 14 issue that energy efficiency program costs are recovered
- **15** from those specific jurisdictions that impose them in
- **16** terms of conservation programs.
- 17 Is it your understanding that only the residents and
- **18** customers in those states can participate in those
- 19 programs?
- 20 A. Yes. Yes, I do.
- **21 Q.** And do these energy efficiency programs generally
- 22 result in lower generation costs?
- 23 A. Lower generation costs? So because you're
- 24 displacing? Is that what you mean? Because you're
- 25 displacing avoided cost?

- **1 Q.** As conservation measures, they're generally
- **2** resulting in fewer additions to the system and lower
- **3** energy costs.

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- 4 A. I think it's a matter of perspective. You'd have to
- 5 look at, you know, cost-effectiveness of those
- 6 energy-efficient initiatives and, you know, whether
- 7 they're passing all of those -- you know, whether they're
- 8 passing all of those tests.
- 9 So I can't just point blank say that that's a
- 10 general rule.
- **11 Q.** Would you agree that some of these programs result
- **12** in reduced or avoided generation investments?
- 13 A. Once again, I guess I'd have to just see the
- 14 information to make that determination.
- **15 Q.** Okay. And one other -- I guess one last point. You
- 16 had indicated that MISO applies a 3 to 1 ratio for
- 17 evaluating cost-effectiveness in a benefit ratio. Are
- 18 you aware of any other State Commission that applies a 3
- **19** to 1 cost-benefit ratio for the purposes of allowing cost
- 20 recovery of a generation resource?
- 21 A. No. And I just want to make one point clear. When
- 22 they talk about the 3 to 1 ratio, that is that if the
- 23 project had an in-service date 10 years ahead, okay, the
- 24 ratio would become 3 to 1.
- 25 If the project's in-service date is two years ahead,
- 1 the benefit-cost ratio would be 1.4. So that would be
- 2 the comparable thing of Nobles because I think you
- 3 submitted the Petition in December of 2008. Nobles got
- 4 built by December 2010.
- 5 Did I answer your question?
- **6 Q.** Yes, Ms. Maini. Thank you.
- 7 A. Okay.
- **8 Q.** And earlier, Ms. Maini, you indicated that you
- **9** assumed that there wasn't the opportunity for further
- 10 discovery on this issue. What was the basis of your
- 11 assumption?
- 12 A. Because we had already started submitting testimony
- 13 from a procedural basis, we were down to -- you know, we
- 14 had finished submitting direct testimony. And so I just
- 15 assumed that we -- that the proceeding, you know, for all
- 16 intents and purposes the discovery period was over.
- **17 Q.** Did you try to ask any questions?
- 18 A. No. Because I just assumed the discovery period was
- 19 over. I mean, we're on our way to submitting testimony.
- 20 And this got presented to us the 27th of April, and then,
- 21 you know, I think I forget the timeline of our response.
- 22 But, you know, we responded.
- 23 But clearly, you know, we spent four months just
- 24 establishing what we ended up establishing. We built all
- 25 this analysis through discovery.

As you know, when we got the direct testimony in

Xcel's initial filing, there was a two-page explanation

about Nobles. And then -- I think by Witness Laura

McCarten. And then there was some financial analysis

provided by Witness Tom Kramer. But we had to literally

start from scratch to get to the bottom of Nobles.

And it took us all that time just to figure so many

And it took us all that time just to figure so many things out. We had to start from scratch.

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So then once I finished providing the direct testimony and then I get this response all of a sudden there's this new information that we've never seen before. So I, frankly, you know, frankly, don't know what to make of it. And that's what I have to say. I'm sorry I sound so frustrated about that but --

MS. VALLEY: Thank you, Ms. Maini. We don'thave any further questions.

MR. SMITH: Commissioners and advisor questions? Chairman Nelson.

CHAIRMAN NELSON: Ms. Valley asked you a question, I believe, should cost recovery be allowed if benefits exceed the costs and you answered yes to that.

Would your answer still be yes even if theutility had no need for capacity or energy?

24 THE WITNESS: Thanks for that question. And
25 maybe I should have been clearer. I think from a

philosophical standpoint if something is not required for need, the benefits have to significantly exceed cost.

3 CHAIRMAN NELSON: Can we answer it from a legal4 perspective instead of philosophical?

THE WITNESS: So basically you're asking me that if the benefits exceed costs but there was no need for it, should cost recovery still be allowed?

8 CHAIRMAN NELSON: Correct.

THE WITNESS: I think that the -- for something like this I think that there should be a lot of more conservative -- what I would call conservative model testing of different approaches to figure out how robust the savings are.

Because I'm not sure that even the first run is conservative enough. We didn't -- you know, we have no idea what the economics would look like if there was limited growth because at that time in December of 2008 the economy was already going down. So there was ample rationale to look at a declining load growth scenario or natural gas prices were going down as well. So what would it have looked like.

So I think to answer your question, Chairman,
Mr. Chairman, I would actually have to understand and I
should have probably done the same with Ms. Valley here
is tried to understand what's the context of saying that

1 the benefits exceed the costs.

2 Am I answering your question?

3 CHAIRMAN NELSON: I'm not sure that you are but

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4 let's move.

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THE WITNESS: Okay. I'm sorry.

CHAIRMAN NELSON: Is it correct you have foundthat Nobles was not a prudent and reasonable expenditure;

is that correct?

THE WITNESS: Right.

10 CHAIRMAN NELSON: In that case so why are you
11 offering this 30 percent alternative? And what benefit
12 does the 30 percent alternative give to rate payers in
13 South Dakota?

14 THE WITNESS: Thanks for that question.

You know, as I mentioned and I wrote in my
testimony too, there is truly ample evidence here for
complete disallowance from a traditional needs
perspective.

We went for the 30 percent disallowance to recognize that there are these fuel and nonfuel saving estimates. With that said, we gave Xcel the significant benefit of the doubt. Because the run that we relied on doesn't recognize these widening error bands. Doesn't -- ignores that as time goes on those confidence bands just

24 ignores25 widen.

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1 And in spite of all of that, we -- we wanted to

2 give some recognition that there are these fuel and

3 nonfuel savings. And we went for the methodology and the

4 30 percent disallowance.

But if you were to ask me, I think we give a
lot -- we give a lot of benefit of the doubt even on that
estimate.

8 CHAIRMAN NELSON: Okay. Thank you. The next
9 question, going back again to that table on page 16 of
10 Mr. Alders' rebuttal that we've looked at a number of

11 times today, in dealing with the second run, if you could

12 just tell me what is -- in your opinion, what is the

13 chief flaw in that second run, other than you got it

14 late? What's the chief flaw?

THE WITNESS: It's not complete. It's not
realistic. The fact of the matter is that particular run
doesn't include the fulfillment of the renewable
policies.

The whole -- the way, you know, these people -- these people. I'm sorry. The way the strategist runs are set up is you basically say minimize costs, subject to all these constraints, and the constraints -- there are a whole variety of constraints. One of the constraints is fulfilling renewable policies and standards. Okav.

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1 CHAIRMAN NELSON: Why should we care about that? 2 Why should we care about fulfilling the standard in 3 Minnesota? 4 THE WITNESS: We should not care about it. But 5 the point is --6 CHAIRMAN NELSON: So why is that a flaw? 7 THE WITNESS: It's a flaw because it's not a 8 realistic depiction of that scenario to assume they're 9 not going to build any further wind. And let me just 10 explain what happens.

That if you pretend that there's going to be no more wind standard after it, it's going to overestimate the savings that are coming from Nobles. Because as you add more and more wind onto the system that follows, the savings associated with wind for Nobles will just keep going further and further down as more and more wind gets added.

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And I believe when they did their first run that approach makes sense to me because it's depicting a reasonable assessment of what they knew they had to deal with at the time they were building Nobles.

Because they weren't sitting there in 2008 and saying, okay, I'm going to pretend I don't have to comply with this renewable policy. The force went into the model to comply with those policies, and then you pick

Nobles in and out and that's an incremental approach.

But then to pretend it's not going to happen after Nobles, that's just simply not realistic, in my opinion.

CHAIRMAN NELSON: Thank you. The last question I've got, and this goes -- is the same guestion I asked Mr. Alders when I referred to his surrebuttal testimony on the bottom of page 11 and top of page 12 when they asked him has the company calculated the benefits that should be transferred away from South Dakota customers if 30 percent of the costs are disallowed, and he makes the case that the disallow -- the amount of money the customers would save is going to be exceeded by the

14 benefits that they're not going to get and, therefore, it 15 doesn't make economic sense for us to disallow that cost.

16 Can you give me your spin on his calculations? 17 THE WITNESS: Okay. I just want to make sure I

18 look at the -- okay. It's his surrebuttal; right?

19 CHAIRMAN NELSON: His surrebuttal testimony, 20 bottom of page 11, top of page 12. I'm not sure what the 21 exhibit number is. Maybe 6. Yeah.

22 THE WITNESS: Okay. I just want to make sure. 23

Why am I not finding -- surrebuttal. Confidential 24 though. It wouldn't matter. Only the last thing is

25 confidential. I'm sorry, Mr. Chairman. Would you please 1 repeat the page number?

CHAIRMAN NELSON: It's the bottom of page 11, 3 top of 12, and he's going through the analysis of why he 4 believes if we pursue this 30 percent option that it's 5 actually going to cost our consumers more than what's 6 being disallowed.

7 THE WITNESS: Oh, yeah. Right. Right. Right.

8 I guess I respectfully disagree with this.

9 Because, as I mentioned to you earlier, when we looked at 10 our disallowance methodology we accounted for the 11

costs -- all the costs and all the benefits.

12 So, for example, we accounted for the production 13 tax credit. Those were accounted for in that 14 cost-benefit disallowance methodology that we did. So I 15 think --

16 CHAIRMAN NELSON: So if I'm understanding you 17 correctly, on the top of page 12 where he's saying the 18 benefits would be worth 681,000 in 2012 and moving up to 19 828,000 in 2015 and then 991, you are saying those 20 numbers really should be 0 because you've accounted for 21 them already.

22 THE WITNESS: Yeah. The time that they were 23 contemplating to build Nobles, the estimated costs and 24 benefits, right, and that's exactly what I'm saying is that we have accounted for all of those and the

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1 disallowance is pretty much saying that after the

2 break-even point of those estimated long costs and

3 benefits, whatever is above that, that's what we

4 disallow. We are allowing it to the point that the

5 benefits exceed the costs.

And like I said, here's again the benefit of the doubt. This threshold should be a lot higher in my mind when we're looking at economic projects as opposed to, you know, necessary needs-based projects.

10 CHAIRMAN NELSON: So just so I'm clear, you're 11 proposing disallowing 30 percent of the costs of the 12 project but are you assuming that South Dakota -- let's 13 use the production tax credit, for example. Are you 14 assuming that we, South Dakota consumers, South Dakota 15 jurisdictional, that we get 100 percent of the production 16 tax credit or 70 percent?

THE WITNESS: 100 percent. Because the value of the production tax credit was already accounted for when we did the disallowance.

And maybe I should walk you through --

CHAIRMAN NELSON: No. I hear what you're saying but that doesn't make sense to me. If we're not paying for 30 percent, why should we benefit 100 percent? I mean, it's a great concept for our consumers but is it fair?

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237 239 1 1 THE WITNESS: In my mind it's fair because this benefits. So the costs were one number, the PVRR 2 2 disallowance methodology already accounted for the value benefits was another number, and the cost exceeded these 3 3 of the production tax credit. And our disallowance benefits by the amount that was -- that had been 4 4 calculated. methodology accounted for that value that we were 5 5 expecting to get from the production tax credit. So what I'm trying to suggest here is that our 6 6 And so now if we start saying that we -- you disallowance methodology -- that's why I say that we've 7 7 know, if you take away 30 percent of the cost, we take 30 already accounted for the value of the PTC in our 8 percent of the benefits, well, then I'll have to turn 8 calculations. It's already been removed. It's accounted 9 9 around and say, well, then I better take -- you know, for. 10 10 disallow some more. Did I help you with this explanation? 11 11 COMMISSIONER HANSON: Yes. Very much so. But The point is that the value of these benefits 12 like production tax credits were already accounted for in 12 it was a challenge from the standpoint of just saying 13 this disallowance methodology. It was taken into 13 it's already been accounted for but it's been accounted 14 consideration, all the value, the projected value. 14 for however at the same time there's a certain percentage 15 15 of allocation that needs to be allocated to the State of CHAIRMAN NELSON: Okay. Thank you. 16 16 MR. SMITH: Other Commissioner questions? South Dakota, at least one -- if you look at it from a 17 Commissioner Hanson. 17 benefits standpoint one would assume so. 18 18 COMMISSIONER HANSON: So, Ms. Maini, what you're So if there's a -- if it's been accounted for 19 19 saying, if I can piggyback on the last question, is it once, that's fine, as long as a percentage goes to 20 20 was added twice, you're saying? South Dakota under that particular theory. 21 21 THE WITNESS: That the production tax credit --You wouldn't subtract 100 percent. Unless in 22 22 like who added it? another column you are -- you are taking into 23 COMMISSIONER HANSON: The consideration. You 23 consideration South Dakota's allocation. 24 24 said it had already been considered and then it was added THE WITNESS: I'm not sure I understood that 25 25 in again in the second portion, and that's why you're question altogether. I'm sorry. 238 240 1 1 subtracting it all? COMMISSIONER HANSON: All right. I'm going to 2 THE WITNESS: No. ask it -- pursue something a little bit differently. 3 COMMISSIONER HANSON: I don't mean to confuse it 3 You were present when Mr. Adler [sic] was 4 any more than it already is. But I am with Commissioner 4 answering questions and testifying and I had asked him a 5 5 Nelson trying to figure out why that particular number of questions about the CO2. 6 6 percentage, why all of it as opposed to a percentage of THE WITNESS: Uh-huh. 7 7 COMMISSIONER HANSON: And I'm wondering if you it would be subtracted. 8 8 THE WITNESS: And perhaps -- and I apologize if examined the pool -- we were talking about the pool of 9 I'm not being clear in my response regarding this topic. 9 all the capacity that Xcel has and the CO2 on average 10 And perhaps I'll take it a step back a little and explain 10 that is produced by them. 11 11 that -- how the cost benefit was derived. Did you analyze that at all, that analysis, that 12 12 So when we got the present value of the revenue modeling, in order to ascertain opinions regarding the 13 13 allocation of the dollars per ton? Did you study that at requirements they were two rows. Okay. The first row 14 14 said here is my PVRR of the gross costs for a 25-year all? 15 15 span. And these gross costs are capital costs, minus THE WITNESS: We did not study specifically that 16 anticipated PTC benefits, operating costs. Okay. So 16 issue, no. What we did look at was trying to ascertain, 17 17 that was one row. you know, how much -- what kind of resources -- what kind 18 18 So in that row when Xcel calculated the PVRR of of energy was being displaced and looked at it from that 19 those gross costs they had already taken into 19 level but not specifically in terms of the dollars per 20 20 consideration the PTC benefits. ton amount, no. 21 21 Okay. Then the next row had -- set of rows had COMMISSIONER HANSON: Well, perhaps you can

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still answer what I'm looking towards, and that is I'm

given towards any particular capacity such that the

wind -- even within a modeling, that all of the capacity

curious whether there was a bias in that modeling process

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all of these benefits and it said fuel savings and

avoided -- energy purchases savings and avoided capacity

savings, and then they totalled that up and said here is

the PVRR over the 25-year period and here are my

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4	241	1		243
1	is as put together there still can be a bias regarding	1 2	If the company bought a car, paid 100, you said	
2 3	which capacity is supplanted by wind. And if the higher producing if the capacity	3	it was only worth 70 and that's all that would be allowed for the full value of the car and as we look at	
4	that produces more a greater amount of CO2 than other	4	Mr. Alders' testimony if he said, well, if we're only	
5	capacity is displaced first or is displaced by the wind	5	going to pay \$70 for that car we're not going to give you	
6	capacity, then, of course, especially if it's coal versus	6	the seat or the production tax credit. And you say,	
7	natural gas, then it would show what I would consider a	7	well, then if you take the seats out we're only going to	
8	bias towards a particular capacity being displaced.	8	pay you 55 and then he would take the tires and so on and	
9	And so I'm curious from that standpoint if you	9	so forth.	
10	would have an opinion on the process as to whether or not	10	And I'm getting to the point that I mentioned to	
11	the higher-producing CO2 capacity was displaced by the	11	Mr. Alders. If they cut the amount of output assigned to	
12	model?	12	South Dakota to 70 percent, you in turn would take only	
13	Because it would reflect considerably on the	13	70 percent of that output to be included in the cost of	
14	value of wind.	14	service, wouldn't you, under your methodology?	
15	THE WITNESS: Yeah. And I think the way to	15	THE WITNESS: That's right.	
16	think about that is to look at the two runs. Okay. And	16	MR. RISLOV: And so it would end up going to 0	
17	maybe that might help us. I'm thinking out loud with you	17	if the Commission tried to adopt both your 70 percent	
18	as I'm talking of it.	18	recommendation as well as Mr. Alders' recommendation of	
19	I'm thinking that if you look at the first run,	19	reducing the output assigned to South Dakota? It would	
20	and you look at how you have Nobles and then you have the	20	eventually go to 0, wouldn't it? It would have to.	
21	2,000 megawatts of wind under one scenario, what's	21	THE WITNESS: Right. If we kept going back and	
22	happening there is that and I'm obviously speculating	22	forth with this, yes.	
23	because I don't have this stuff in front of me but I'm	23	MR. RISLOV: Yes. It would just reiterate to 0.	
24	thinking that the value of what that is displacing gets	24	So the Commission couldn't do that and make any sense	
25	lesser and lesser as more wind gets added to the system.	25	with this particular issue; is that correct?	
	242		2	244
1	Whereas when you're looking at the second run,	1	THE WITNESS: That's correct.	
2	it's by default ending up displacing more CO2-based	2	MR. RISLOV: I want to go to the issue of	
3	resources because that's the only wind resource and after	3	carbon.	
4	that there's no other wind.	4	THE WITNESS: Okay.	
5	So from a relative standpoint if I look at it	5	MR. RISLOV: And the company had a range, I	
6	from that perspective, the second run is probably biased	6	believe, of 4 to \$30? Is that your recollection?	
7	more towards displacing higher CO2, if I look at it from	7	THE WITNESS: That's right.	
8	that perspective.	8	MR. RISLOV: And I want to go back to the	
9	COMMISSIONER HANSON: Okay. Thank you for that.	9	context of 2007, pending legislation, the rumblings	
10	I believe that's all the questions I have for this time.	10	within the industry.	
11	Thank you.	11	And it was and I would pose it was quite a	
12 13	THE WITNESS: Thank you. MR. SMITH: Mr. Rislov.	12 13	different era than even now, five years later. In 2007 what were you thinking in terms of cost	
14	MR. RISLOV: Hello.	14	per ton of CO2? Do you recall?	
15	THE WITNESS: Hi.	15	THE WITNESS: Not at all. I don't. It's hard	
16	MR. RISLOV: I only have a couple of easy	16	to go back and think of what I I don't recall.	
17	questions, I hope. I took the gist of your 70 percent	17	MR. RISLOV: And to me that's can be a	
18	number to mean one thing. If you take all the positive	18	critical issue in this decision simply because as we	
19	aspects of the Nobles Wind Farm, which would include the	19	drive the value of CO2 up it's going to make Nobles look	
20	generation and the production tax credits and everything	20	much more reasonable from your point of view on a	
21	else, it was worth 70 percent of what the company paid	21	benefit-cost basis; is that correct?	
22	for it in your view; is that correct?	22	THE WITNESS: Yeah. If you're asking that the	
23	THE WITNESS: That's right.	23	higher the value you place on carbon, the lesser the cost	
24	MR. RISLOV: So it would be like a car. I'll	24	disallowance. Simply put, yes.	
25	put out an analogy.	25	MR. RISLOV: If I could pose another	
25	put out an analogy.			

		245	247
1	hypothetical at what price per ton of CO2 would you		But the fact of the matter is we don't have
2	consider Nobles to be beneficial?		2 carbon regulation even today. But that I realize is
3	THE WITNESS: Do you mean the entire?	;	hindsight. And I know we can't rely on that. So, you
4	MR. RISLOV: Project, yes.	.	4 know, it's hard for me to say.
5	THE WITNESS: Based on what the results we		MR. RISLOV: If I could ask one last question,
6	are relying on, I mean, the costs are already exceeding	(do you have any idea of where the industry was sitting
7	the benefit so much, I think and let me step back and	-	7 when estimating CO2 costs back in 2007 within their
8	say that when I looked at the scenarios presented in the	;	strategist modeling, if you will? Do you have any idea
9	Petition at \$30 a ton it was roughly breaking even.		what was an industry norm at that point if Xcel's numbers
10	From my perspective, any amount of value to	10	somehow bore resemblance to what was considered to be an
11	carbon is going further than where I'd like to go because	1	1 industry norm?
12	like I said, we were already giving Xcel so much the	1:	THE WITNESS: I can't answer that question. I
13	benefit of the doubt. And we needed to be conservative	1:	3 mean, I don't I don't know what I simply don't
14	because the costs were already exceeding the benefits.	14	4 know. I'd have to go back and think about that at this
15	And typically in these situations I tend to look	1	5 time.
16	at the business as usual what I would consider the	1	6 MR. RISLOV: Thank you. I'm done.
17	business-as-usual case. And in a business-as-usual case	1	7 MR. SMITH: Any other Commissioner questions?
18	there was no carbon regulation.	18	Seeing none, I'm wondering if before we turn to
19	And so if I had to be, you know talk about	19	9 Staff for redirect here if we is it time to take a
20	any value, I actually would not place any value if you	2	15-minute break.
21	were to ask just my opinion. Because there's no	2	1 (Discussion off the record)
22	legislation at that time.	2:	REDIRECT EXAMINATION
23	MR. RISLOV: So is it your testimony then that	2	BY MR. SOYE:
24	it's appropriate when modeling for system resources that	2	4 Q. Just a few more. And this is all just based on
25	the business-as-usual case be used to forecast 25 years	2	responses that you've given or questions you've been
		246	248
1	into it the future?		1 asked from the other parties. I will actually address
2	THE WITNESS: I think my testimony is that one	2	two of the issues you were asked at once when you were
3	should look at a range of testimony one should look at	;	responding to Ms. Valley considering the benefits
4	a range of sensitivities.	'	4 exceeding the costs, if the benefits exceed the costs and
5	You have a business-as-usual case. Then you do	!	would you approve it? And then we started talking about
6	all these sensitivities to see how the resource performs	1	by how much and you gave your MISO example.
7	on a wide range of sensitivities. And depending on what		I realize that something in our discussions as Staff
8	the you know, the policy is, you determine which	1	8 would know that we haven't made clear here is your
9	particular sensitivities are more important to you than	_	analysis for the degree or the amount that costs
10		110	
	others.		,
11	But in general, people in general one relies on	1	1 project, is it the same when you're dealing with a
12	But in general, people in general one relies on the business-as-usual case to make determinations, unless	1:	project, is it the same when you're dealing with a project meant to cover resource or need obligations
12 13	But in general, people in general one relies on the business-as-usual case to make determinations, unless you get you know, unless you have some policies in	1: 1:	project, is it the same when you're dealing with a project meant to cover resource or need obligations and those projects that are meant only to serve as
12 13 14	But in general, people in general one relies on the business-as-usual case to make determinations, unless you get you know, unless you have some policies in mind that you consider important and then you consider	1: 1: 1:	project, is it the same when you're dealing with a project meant to cover resource or need obligations and those projects that are meant only to serve as economy energy?
12 13 14 15	But in general, people in general one relies on the business-as-usual case to make determinations, unless you get you know, unless you have some policies in mind that you consider important and then you consider those policies, the form of sensitivities.	1: 1: 1: 1:	project, is it the same when you're dealing with a project meant to cover resource or need obligations and those projects that are meant only to serve as economy energy? A. So in other words, is the benefit-cost threshold the
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12 13 14 15 16 17 18 19 20 21	But in general, people in general one relies on the business-as-usual case to make determinations, unless you get you know, unless you have some policies in mind that you consider important and then you consider those policies, the form of sensitivities. MR. RISLOV: What would your high case be for CO2 if you were going to run sensitivity analysis just simply on that issue? THE WITNESS: I think I would do I would look at the \$17 as the high case. MR. RISLOV: What kind of a what level of probability would you place on that high case?	1 12 13 14 16 11 16 19 20 22 22	project, is it the same when you're dealing with a project meant to cover resource or need obligations and those projects that are meant only to serve as economy energy? A. So in other words, is the benefit-cost threshold the same when you're looking at need versus economic energy? Q. And you gave your MISO example. So I'm just wondering are they equal or are you saying you need to show, as you said, significantly more cost for these discretionary A. Projects? Q. Yes.
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- 1 one generation resource versus another generation
- 2 resource. And that is different than when you're looking
- 3 at a discretionary resource, I mean, but it's not needed.
- 4 So that's why those savings and the benefit-cost
- 5 threshold has to be that much more significant.
- **6 Q.** And as I follow up on that, when you're talking
- 7 about the MISO example, does that refer specifically to
- 8 wind as well, or is it simply referring to the projects
- **9** in which you're looking to spread the costs across the
- 10 system?
- 11 A. No. That's basically these economic projects. So
- 12 basically the benefit-cost threshold I described is for
- 13 what are termed economic projects.
- **14 Q.** Thank you.
- 15 A. Not wind. It's economic projects.
- **16 Q.** Sorry.
- 17 A. Uh-huh.
- 18 Q. Okay. You were questioned a bit on those MISO
- **19** energy costs that you compared your 7 percent and 10
- 20 percent.
- 21 A. Yeah.
- 22 Q. And the year in which you chose. And I just want to
- 23 make clear that you were saying it doesn't matter what
- 24 year I used because I was using averages versus day to
- 25 day? I'm not completely clear on what you mean by
- 250

- **1** averages.
- 2 A. I see. Okay. What I mean by averages is taking the
- 3 hourly MISO prices and figuring out what an on- and
- 4 off-peak average is by month and comparing that to what
- 5 the hour-by-hour prices are.
- 6 And so what I was trying to suggest there is when
- 7 you look at the averages -- when you look at the on- and
- 8 off-peak average and you multiply that with the Nobles
- 9 output and compare that to the hourly Nobles output
- 10 multiplied by the hourly energy price, I found that the
- 11 on- and off-peak average method overestimates the savings
- 12 by 7 to 10 percent, compared to the hour-by-hour look.
- **13 Q.** Okay. So it's your testimony that -- I'm giving you
- 14 this example, just an example to tell you what strategist
- **15** does.
- 16 A. Right. That strategist uses on- and off-peak
- 17 averages instead of the hourly.
- MR. SOYE: I actually was going to follow up on
- 19 the disallowance method and I was going to use the car
- 20 example taking away the tires but I'll just leave that
- 21 alone.
- **22 Q.** Okay. Do you -- you were asked a little bit about
- 23 the conservative method. And you said -- do you
- 24 consider -- I don't consider the conservative method
- **25** conservative enough?

- 1 A. Yes.
- **2 Q.** Why is that?
- 3 A. It's because, you know, the conservative method --
- 4 and I think I mentioned this earlier, that at the time
- 5 this Petition was submitted we were already in terms of
- 6 economic activity slacking off. And it would have been
- 7 very realistic to look at a scenario that had limited
- 8 load growth where the load growth was declining.
- 9 Or at that point natural gas prices were also going
- 10 down. So I would have looked at those particular
- 11 scenarios to see what the benefit-cost thresholds looked
- 12 like. And this particular runs don't have that.
- **13 Q.** Just so we're clear, my understanding of what you're
- **14** saying about conservative.
- 15 A. Uh-huh.
- **16 Q.** Is that it needed to be further explored with regard
- 17 to sensitivity and scenario analysis?
- 18 A. Yes. What I'm -- right. I guess what I'm trying to
- 19 say is that in the Petition we had some runs; right? We
- 20 had three runs that did carbon sensitivities, one that
- 21 said no PTC, and one that said gas prices going up by 20
- 22 percent.

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- 23 And I guess all I'm trying to say is where is the
 - other side of the story? What if natural gas prices go
- 25 down by 20 percent? What if load goes down, you know,
- - declines further? And, you know, that's basically what'scalled robustness testing. And I feel like it lacks this

- 3 whole one side of robustness testing.
- **4 Q.** Okay. And on the conservative modeling approach
- 5 too, you had mentioned that you believe it's more
- 6 appropriate because it recognizes this 2,000 megawatts of
- 7 additional energy.
 - Do you believe that even though Xcel says, well, we
- **9** modeled this 2,000 megawatts before Nobles to be
- 10 conservative, is it my understanding you feel that these
- 11 additional 2,000 megawatts should still be included in
- 12 the analysis?
- 13 A. Yes. It should be included in the analysis, yes.
- **14 Q.** Okay. And you've said because that's realistic;
- **15** correct?
- 16 A. That's right.
- 17 Q. Okay. Is there anything more you want to say on
- **18** that? I actually don't know the question I want to ask
- 19 right now but I know there is one. We'll just leave it
- 20 there.
- 21 If the additional 2,000 megawatts is built
- **22** regardless of whether the costs are recovered in
- 23 South Dakota, are the benefits of Nobles reduced?
- 24 A. Yes, they are. Because, you know, as you are
- 25 putting more and more wind into the system, the Nobles is

	253		255
1	displacing less and less of the higher cost power.	1	THE WITNESS: Thank you.
2	Because now you've got more wind coming into the system.	2	MR. SMITH: It's my view that we should take a
3	And if I had to put it another way, it's basically	3	break before we proceed with is that fair? I do. I
4	the savings are being cannibalized by additional wind if	4	mean, I'm getting blurry eyed here so I wouldn't mind
5	I had to say it another way. That's basically what would	5	having a little rest. What do you think? Should we take
6	happen is the benefits would reduce.	6	a 15-minute break? I mean, we've been at this for a long
7	And that's to some extent I think that's what the	7	time.
8	first run shows. The first run shows that when you	8	CHAIRMAN NELSON: It kinds of depends on how
9	include the 2,000-plus megawatt hours of wind to comply	9	this is going to unfold. I think the three Commissioners
10	with that mandate that's what it shows, that the value	10	would like to break at 1 o'clock for the trail of
11	goes down. That's what it shows.	11	governors but that's not an absolute requirement. I
12	Q. Okay. And I'm going to follow up on this just	12	mean, our primary mission is to conclude this.
13	because well, I don't know if you can answer it is	13	MR. SMITH: Okay.
14	what I'm saying. But Commissioner Nelson had asked	14	COMMISSIONER HANSON: Yep. That's right.
15	earlier is there a way to justify this on legal grounds.	15	MR. SMITH: You guys just let me know. I mean,
16	Earlier you were questioned on whether or not you	16	we've been at this now for it's been over two hours.
17	had followed up with additional questioning after you had	17	I mean, there's a certain point where people
18	written your briefing. Do you know who has the burden of	18	CHAIRMAN NELSON: Maybe somebody help me. How
19	proof in this case?	19	much time are we going to need to conclude?
20	A. Yes. That's Xcel.	20	MS. CREMER: Maybe we can go off the record and
21	Q. Did you feel it was their responsibility to provide	21	discuss this during your 15-minute break here or we
22	you with this information?	22	can take 5 minutes here and figure out. Do you know how
23	A. Yes. Because, you know, it's the burden of proof.	23	much redirect you're going to have?
24	They needed to provide us all this information, yes.	24	MS. VALLEY: No, I don't know at this point.
25	Q. Okay. And Mr. Rislov had asked what is the carbon	25	MS. CREMER: Are you calling someone, though?
	254		256
1	price that would be needed to break even, and you guys	1	MS. VALLEY: I was just going to ask for a brief
2	talked quite a bit about what you would use as a carbon	2	break to consider that for a moment.
3	price and your philosophy and whatnot.	3	MR. SMITH: Okay. Why don't we take a 15-minute
4	And I was just wondering, to be clear on that, you	4	break so you can discuss what you want to do and we
5	did mention \$30 per ton carbon price in their	5	will we can all get refreshed a little bit here.
6	conservative modeling approach. You almost got to a	6	Thanks.
7	break-even point.	7	(A short recess is taken)
8	So am I understanding that in order to equalize	8	MR. SMITH: Okay. Let's call the hearing back
9	those costs and benefits in which no disallowance would	9	to order. We had, I think, just concluded with Staff's
10	be required, you would have to be above \$30 per ton	10	case. Is that correct, Mr. Soye? Are you done?
11	carbon somewhere?	11	MR. SOYE: Yes. We have nothing further.
12	A. Yeah. And significantly above, yes. That's right.	12	MR. SMITH: Okay. We'll proceed to Xcel
13	Q. Okay. Ms. Maini, do you know what Otter Tail Power	13	rebuttal then.
14	is modeling for carbon price in the modeling they're	14	MS. VALLEY: Thank you. We'd like to recall
15	currently using?	15	Xcel Energy's witness Mr. Jim Alders.
16	A. Current modeling? No.	16	<u>DIRECT</u>
17	Q. Okay. If you don't know, that's fine.	17	<u>EXAMINATION</u>
18	MR. SOYE: I believe that's it, Mr. Smith.	18	BY MS. VALLEY:
19	MR. SMITH: Thank you. And we'll turn to Xcel.	19	Q. Mr. Alders, could you please clarify how carbon
20	Do you have any further questions to address the	20	costs are included in the strategist model?
21	Commissioner the number of Commissioner questions that	21	A. The strategist model does not use carbon cost to
22	were asked?	22	dispatch resources. It does not include carbon costs as
23	MS. VALLEY: No, Mr. Smith.	23	part of the production costs of the facility.
24	MR. SMITH: You don't. Okay. I think you may	24	When evaluating or when coming up with the present
07/02	step down then, Ms. Maini. Thank you very much. /2012 04:02:51 PM Page 253 to	25	value of system requirements, carbon costs are added of 281 64 of 113 sheets

1 after the model has estimated the cost of operating the 2 system. And so it's not incorporated into the cost of production at facilities.

4 **Q.** Thank you. And you heard testimony from Ms. Maini

5 today explaining her example comparing actual cost of

6 Nobles to current MISO cost, that result in what she

calls a band of errors. And she had indicated that

8 strategists did not account for the intermittency of

9 wind.

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Can you respond to that?

Α. Without a wind-integration cost, as we have labeled it, she is correct. However, we did run PROMOD to identify what costs would be incurred in the system to accommodate the intermittency of wind.

And we loaded that cost into the strategist model as I identified on page 5 of my surrebuttal testimony. The wind-integration costs for -- that we loaded into the model started at -- not starting but at \$1.71 per megawatt hour in 2011 and then that was escalated to \$9.39 per megawatt hour out in the 2035 time frame.

And so the spending reserve, the response to the intermittency of wind power, the other operating characteristics that PROMOD captures, were examined in PROMOD and then loaded into the strategist model.

25 **Q.** So based on that assessment, the strategist models

1 and the cost-effectiveness analysis the company performed

did include an accounting for the intermittency of wind?

3 A. It does.

4 MS. VALLEY: Thank you. I don't have any

5 further questions.

6 MR. SMITH: Staff.

7 MR. SOYE: No further questions from Staff.

MR. SMITH: Any Commissioner advisor questions?

9 I have one question, if I might. And I'm

10 just -- it's your opinion in response to Ms. Maini's

11 discussion about the relevancy, applicability and

12 relevancy to this proceeding where we're just talking

13 about Nobles, just Nobles, of the conservative model that

14 you introduced over in Minnesota, could you just

15 elucidate for me your view on that in terms of this

16 proceeding, not the Minnesota proceeding.

THE WITNESS: Mr. Smith, I think all of these

18 analyses are approximations or estimates of how the

19 system's going to operate over 20 or 30 years. And so we

20 have a tendency to assign much more precision to all of

this than probably is justifiable. 21

22 We presented the conservative analysis in the

23 Minnesota proceeding to illustrate that regardless of

24 what you think about how we'll add wind power over time

25 that the Nobles addition was a pretty cost-competitive

1 alternative within reasonable range.

2 If you want to look at what the actual impact -- 259

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3 not actual but more accurately look at the potential

4 impact of wind power from Nobles on our system, that

5 incremental approach is more informative, I believe.

6 More informative in the sense that it properly captures

the effect of adding Nobles to the system without regard

8 to what we may or may not do with additional wind out in

9 the field.

10 All of these wind additions are incremental 11 decisions the company has to make. Each time we add a

12 resource it's not about what the impact of that next new

13 resource will be on the cost-effectiveness of something

14 we did five years ago. The question at that moment in

15 time will be what's the incremental impact of this

16 particular resource on our system, regardless of which

17 direction we take on future wind additions or future

18 other additions to our system. And so that incremental

19 approach is, I believe, more informative.

20 The analysis we presented in Minnesota was more 21 general. Had we received -- had we been pressed in those

22 proceedings to examine more closely or were we criticized

23 about the resource not being cost-effective, I'm quite

24 certain we would have refined our analysis.

MR. SMITH: Thank you.

1 Do you have any follow up to that then?

> 2 MS. VALLEY: No.

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3 MR. SMITH: Staff?

MR. SOYE: No follow up, no.

5 MR. SMITH: I think you may step down then,

6 Mr. Alders. Thank you.

7 Are we ready to proceed to closing arguments or

8 do you have another witness to call or --

9 MS. VALLEY: Thank you. We have no further

10 witnesses to call.

11 MR. SMITH: Well, at this point I think we can

12 probably proceed to closings, unless the Commission --

13 Commissioners, please advise me if you think otherwise

14 because of your original desire to break at 1:00.

15 Should we proceed then?

16 Okay. Why don't we proceed then with closing

argument. We'll begin with Xcel and we'll go to Staff

18 and then give you one last bite at the apple.

19 MS. VALLEY: Okay. Thank you, Mr. Smith, Chair

20 Nelson, Commissioners.

21 We brought the remaining contested issues of

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ROE, capital structure, and cost recovery for Nobles to

23 the Commission because these issues are of fundamental

24 importance and the Commission's decisions on these issues

25 will have significant implications on our business and

1 our South Dakota customers.

As the Commission knows, its role is to weigh the evidence presented and exercise its reason judgment to determine just and reasonable rates, rates that are fair for our customers and fair for the utility.

In determining just and reasonable rates the Commission considers the public need for adequate, efficient, economical, and reasonable service and the utility's need for a revenue sufficient to enable it to meet its cost of service and to earn a fair return.

As Ms. McCarten testified we initially prepared our rate filing to reflect only those items consistent with the prevailing standard the Commission applied in our last case. During the course of Staff's investigation and during the settlement discussion we nonetheless agreed to numerous adjustments which were included in the settlement approved by the Commission.

We also modified our initial ROE request from 11 percent to 10.65 percent to reflect changes in market conditions that developed over the course of the proceeding.

Our request before the Commission today reflects accurate up-to-date information and an appropriate balance of interest between rate payers and investors.

As Ms. McCarten testified, however, even with

the 10.65 percent ROE our actual 2012 ROE will be no

the 10.65 percent ROE our actual 2012 ROE will be nohigher than 8.1 percent, far below a reasonable rate of

return. If the Commission accepts Staff's position our

4 actual 2012 ROE will fall to 6.3 percent, a level even

further below what might be considered reasonable.

We believe this real-world result provides an appropriate framework to understand the company's current financial position. But we emphasize that it's the stand-alone analysis of our expert that supports the ROE that we request.

A reasonable ROE must be comparable to returns available from other investments of similar risk, sufficient to attract capital and while we recognize that the determination of ROE is complex, the primary test of the adequacy and allowed return is the result of the analysis.

The question is are the results consistent with prevailing standards, a common sense test of reasonableness, and the need to balance utility and rate payer interests. These are all factors the Commission should apply in reaching its decision.

Mr. Copeland's result as well as his analysis
fails these measures. He recommended an ROE of 9
percent, a level far below even the lowest group of other
state-awarded ROEs in the nation. His recommended ROE

and even the top of his 8.5 to 9.5 percent ROE range do
 not meet the test of reasonableness, don't meet the test
 of comparability, and would not be sufficient to track
 capital.

And in his testimony, Mr. Copeland explained
that the large differences in the proposed ROE ranges
from our experts were due to the fact that other
Commissions across the country were uninformed about this
fundamental aspect of their rate-making role and were
otherwise biased.

We don't agree. We believe commissions are thoughtful in their work and recognize that commissions exercise their reason judgment based on the facts before them. To accept Mr. Copeland's recommendation would require a finding that these other regulatory agencies are wrong or that our South Dakota operations have significantly lower risk than these other jurisdictions.

There's no support for either of those findings.

Further, Mr. Copeland agreed in his testimony before the Commission that Staff's Exhibit 7 did not reflect utilities comparable to NSP for purposes of risk and ROE. That is they were not fully integrated utilities with generation, distribution, and transmission functions. Therefore, even that limited ROE -- that list of ROEs, which was only for those that were granted under

1 10 percent, does not reflect the norm and does not2 reflect a comparable base for utilities.

Also Mr. Copeland's position regarding market to
book value as an appropriate indicator of reasonable
returns represents a radical and unfounded departure from
South Dakota and national precedent.

In contrast, the evidence in the record shows that our proposed 10.65 percent ROE meets the standard of comparability to returns from other investments and thus the related standard of sufficiency to attract capital.

The testimony of Mr. Coyne supports the proposed ROE that is well within the national norm and is appropriate for our current circumstances, a very substantial capital investments.

The discrepancy in the analyses between the two experts relates to the selection of the appropriate growth rate. Mr. Coyne determined the growth rate based solely on forecast earnings growth, as do most analysts in these proceedings. As he explained, the approach was reasonable because investors looked to earnings growth as the fundamental source of long-term growth. Because earnings growth is the only consensus data that is widely available to investors and because the use of earnings growth is supported by research, the result also passes the test of comparability.

Mr. Coyne's rebuttal explains the negative impact on earnings caused by a combination of substantial new investments, historic test years and resulting regulatory lag, and prior low authorized returns. The harm from an ROE that is not reasonably comparable would be compounded by our substantial capital investment program. But although the company has indicated that the historic test year exacerbates the effects of a low ROE in times of substantial investment, as Mr. Coyne testified, the actual ROE proposed is not affected by the fact that a historic test year is in place in this case.

The basic tenants of capital attraction, maintenance of financial integrity, and comparability of returns are not optional, not the inclination of one individual, and despite Mr. Copeland's disagreement these tenants have been upheld and applied by the State Supreme Court.

We urge the Commission to view the evidence in the record on ROE with a common sense approach to assessing reasonableness and if the Commission selects the ROE proposed by Mr. Copeland and adopts Staff's Nobles adjustment the company's actual ROE falls to 6.3 percent. Such a result is unreasonable by any standard.

In addition, we note that the capital structure used by Mr. Copeland does not match the test year and

would be inappropriate for setting rates here. In contrast, the company uses consistent data and debt costs that match the test year and which should be relied upon for determining the appropriate capital structure.

With respect to Nobles, the evidence in the record demonstrates that Nobles is a cost-effective resource for our customers and the Commission should grant cost recovery of the Nobles investment in this case.

While we disagree that the test for cost recovery is only whether a resource provides benefits that exceed cost, the Commission does not need to consider the issue since the evidence in the record supports that the benefits of Nobles do exceed its costs and, therefore, qualifies for cost recovery even under that limited standard.

We evaluated Nobles under three separate analyses, and each support finding Nobles to be a cost-effective source of energy for our customers. The most conservative analysis was provided to the Minnesota Commission and assumed that 2,000 megawatts of other renewables would be added to meet our renewable requirements and that those were had to have Nobles.

But even under that conservative analysis,Nobles was cost competitive, within 0.11 percent of the

1 no-build alternative.

In reality Nobles is being added before that future addition of 2,000 megawatts. And when evaluated in the incremental basis of where Nobles actually sits in our generation resource mix, the benefit -- Nobles shows between 4 million and \$80 million in savings to our customers depending on the assumed cost of carbon.

This more realistic actual incremental modeling which was conducted at the time of the decision to add Nobles reflects the true position of Nobles and the higher resulting benefits.

We also compared the cost of Nobles against forecasts of the cost of obtaining energy from the MISO market and using market forecasts available at the time the selection of Nobles was made demonstrates that obtaining energy from the market would have been over \$3 a megawatt hour more expensive.

We agree that it is the company's burden to prove the cost of Nobles and to meet the statutory standard. We acknowledge that the incremental analysis should have been provided sooner. Our error was not deliberate. But that shouldn't justify ignoring the facts in the record here that show that the analysis and that Nobles benefits South Dakota customers.

The testimony of Mr. Alders supports that the

project is cost-effective and a good resource. The

2 Commission's review needn't go any further. However, if

3 the Commission does consider Nobles was one component of

4 our large integrated system which Staff agrees benefits

5 our South Dakota customers, such consideration offers

further support for full cost recovery.

And although Staff indicated in their opening remarks that none of these analyses are sufficient to justify a cost recovery, Staff has not offered evidence that the project is not cost-effective.

Further, Nobles was not a discretionary resource. Staff contend -- or Ms. Maini, their witness contends that Nobles was not needed because at the time of the decision to invest in Nobles the company had already over 10 percent of its generation from renewables. However, as Mr. Alders clarified for the Commission as sales grew, the percentage of our generation that was renewables based would have fallen below 10 percent without new additions.

In addition, Mr. Alders explained and the
Commission raised questions about the fact that if the
Commission were to deny cost recovery of all or a portion
of Nobles then the corresponding benefits should be
reallocated to the jurisdiction paying those costs.
Those benefits include renewable energy credits,

production tax credits and bonus depreciation and/or more
 than the proposed disallowance in this case. In short,
 the Commission decision denying some of or all of the
 cost of Nobles would result in rates increasing in
 South Dakota.

Finally, all the Nobles costs were prudent. The testimony simply doesn't support a disallowance for the cost in excess of the estimate that was provided at the time the Petition for approval was submitted in Minnesota. Those incremental actual costs were necessary to bring this project online. They were prudently incurred and are a very small portion of the total project cost amounting to just about 2 percent.

Contrary to Staff's argument, the approval of Nobles' investment is squarely in line with the principles of rate making outlined in South Dakota statutes. The Commission's standard for reviewing and improving cost recovery is whether the investment was prudent, economical and efficient, and reasonable and necessary to provide service.

The facts demonstrate that the selection of Nobles satisfies this standard.

And we recognize we bear the burden to show that our proposed rates are just and reasonable and we believe we've met that burden. The testimony demonstrates that

the company's proposed ROE meets the standard of

comparability, the proposed capital structure is

3 reasonable, and the cost of Nobles satisfy the statutory

standard for cost recovery.

Accordingly, we respectfully request that the Commission find that the proposed 10.65 percent ROE, 13-month average capital structure, and full cost recovery of South Dakota share of Nobles are supported by

9 the testimony in this case and consistent with the10 Commission's important role of balancing the interests of

11 customers and investors.

12 Thank you.

MR. SMITH: Thank you. Staff.

MS. CREMER: Thank you. This is Karen Cremer of

Staff. And to clarify, and Xcel has agreed to do this,

16 I'm just going to talk about the ROE portion of closing

and Mr. Soye will talk about Nobles.

MR. SMITH: That's fine. Thank you.

MS. CREMER: Thank you. Staff submits that theevidence presented by its witnesses would establish rates

21 that are just and reasonable fairly balancing the

22 interests of NSP and its rate payers.

Staff's proposed rate of return and allowance

24 for Nobles recovers no more than NSP's current revenue

requirements including a reasonable return to its

1 stockholders adequate with its cost of equity capital.

Approval of Staff's position on these matters will permit NSP's customers to continue to receive safe, adequate, and reliable service at just and reasonable rates as required by SDCL 49-34 A-8.

NSP has the burden of proof to show that its proposed rates results in just and reasonable rates. Any doubt as to the reasonableness of this rate should not be resolved in the favor of the shareholder.

Mr. Copeland testified that NSP's exclusive reliance on projected earnings per share growth rates as the metric of growth in the DCF analysis resulted in an inaccurate valuation since dividends are expected to grow more slowly than earnings.

This resulted in NSP's overestimation of the cost of equity in its request to earn a return on equity that far exceeds investors' required return.

At the present time the appropriate method to estimate growth is to factor in the impact of other growth metrics besides earnings per share as Mr. Copeland does in his DCF analysis.

Mr. Copeland also demonstrated that NSP's adjustment to the ROE floatation costs 25 points is excessive. He calculated that an appropriate adjustment would be no more than 6 basis points and that given the

1 range of return on equity that is reasonable, a specific2 adjustment was unnecessary.

Mr. Copeland also testified that NSP's method of
determining capital structure by using a 13-month average
is inappropriate. As pointed out by Mr. Copeland,
whatever merit a 13-month average may have in other
matters, it does not apply to capital stock balances.

In use of actual capital structure as it stood
on December 31, 2011 is a known and measurable change
that should be reflected.

NSP is asking this Commission to set rates using a return on equity that is significantly higher than the assumed rate of return it uses to calculate revenue requirement for pension assets.

Such a divergence in assumed rates of return is illogical and points to the reasonableness of Mr. Copeland's recommendation of 9 percent return on equity. NSP's request of 10.65 percent is out of touch with financial reality.

Ms. McCarten stated in her earned return testimony that the company's actual earnings from its South Dakota electric operations have been far below both reasonable levels and authorized levels. This is a very broad and sweeping statement that does not paint an accurate picture of NSP's returns in the past 20 years.

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Ms. McCarten's testimony only provided historical earnings from 2009. Prior to 2009 it had been 17 years since NSP filed a rate case. As Mr. Copeland testified, utilities that are earning their authorized ROE or overearning are not going to be filing a rate case.

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In truth, during the majority of the last 20 years NSP's actual earnings are most likely at or higher than its authorized levels. Clearly, regulatory lag has helped the company more than it has hurt the company in the last 20 years.

NSP asks that you give weight to what has occurred in other jurisdictions. As pointed out by Mr. Copeland, it is a slippery slope to start comparing jurisdictions and the resulting authorized ROEs when making your determination in this case.

Without an intimate knowledge of how that number came about, which ones were settlements, which ones were contested, it's an apples to oranges comparison. As you well know, the decision to be made here must be based solely on the record before you.

The proper balance when weighing the public interest and invoking the statutes would be to set the rate of equity at the lowest credible estimate of the investor required return. This is where the true

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balancing of consumer and investor interest takes place.

Staff recommends that the Commission find in this case that the appropriate ROE is 9 percent, that the appropriate percentages for capital structure is 46.96 percent for debt and 53.04 percent for equity, and that the overall -- the appropriate overall rate of return is 7.63 percent, which will result in rates that are just and reasonable.

Staff's proposed rate of return and allowance for Nobles recovers no more than NSP's current revenue requirements, including a reasonable return to its stockholders adequate with its costs of equity capital. Approval of Staff's position on these matters will permit NSP's customers to continue to receive safe, adequate, and reliable service at just and reasonable rates.

Acceptance of Staff's recommendations on these two issues will result in a final order that may be reasonably -- that may reasonably be expected to maintain the financial integrity of NSP, attract necessary capital, and fairly compensate investors for the risk they have assumed and yet provide adequate protection to the relevant public interest, both existing and foreseeable.

24 Thank you. 25 MR. SMITH: Mr. Soye. 1 MR. SOYE: Thank you, Mr. Smith.

2 With respect to Nobles, Staff will simply say

3 that we believe it's clear that Xcel has failed to

4 establish that Nobles is a reasonable and necessary resource addition to serve its South Dakota customers.

6 With respect to renewables it's been shown that

7 Xcel defines need as the integrated resource -- with

8 respect to its integrated -- excuse me. With respect to

9 its renewables resource planning is the various renewable

10 objectives or standards in the states that it operates,

11 Staff disagrees with this definition of need.

When the decision was made to build Nobles, Xcel had achieved the renewable policies within three of the five states in which it operated at the time. And it was nearing the 12 percent for Wisconsin.

In the conservative modeling approach Xcel modeled an additional 2,000 megawatts of wind in addition to the Nobles and Merricourt projects that were included in that filing and only one Renewable Energy Standards, Minnesota, requires that level of renewables investments.

21 It's very clear that Minnesota Renewable Energy 22 Standard is driving the renewables development at 23 Minnesota. I'm sorry. At Xcel.

As for the models themselves, Staff believes the

25 Commission cannot rely on the second modeling approach, 276

1 as it does not accurately represent the cost and

benefits of Nobles. It assumes no additional wind is

3 added after Nobles. This second modeling approach is

only useful until additional wind is added which has

5 already happened. The second modeling approach is a

6 snapshot of cost benefits that does not reflect reality,

7 even now.

8 As such, Staff believes the conservative 9 modeling approach is the appropriate cost benefits of the 10 Nobles project. This model properly shows the cost 11 benefits over the life of Nobles and reflects the cost 12 benefits in comparison to Xcel's total plan when the 13

decision to build Nobles was made.

14 And there must have been a reason why the 15 resource planning department at Xcel provided this study 16 to those who presented the case to the Minnesota 17 Commission, to the North Dakota Commission, and now to 18 the South Dakota Commission. Because this is the study

19 that actually shows the cost benefits of the Nobles Wind

20 Project.

21 And, in fact, Xcel agrees that this conservative 22 modeling approach shows that the costs of Nobles outweigh 23 the benefits and, therefore, Nobles was not a prudent, 24 efficient, and economical investment.

Xcel relied upon an analysis that showed that

1 Nobles would lose money and proced investment. In addition to the lack failed to prove that Nobles is a cost 4 Staff understands the policity adjoining states are not controlled to establishes a way of doing business 7 relied upon the integrated resource 8 it is a beneficial and efficient planni 9 However, as stated by Ms 10 cannot apply to certain policies. 11 Nobles was built based on 12 which is for lack of a better word ex 13 its surrounding state policies. And 14 of the bill leading to the Minnesota 15 answering our questions and not Xo 16 not how the world works.	of need Xcel has -effective resource. cy mandates of by Xcel. Also, Xcel that works. Xcel has planning approach and ing model. Maini, this model another state's policy etreme compared to perhaps the sponsors ROE should be tel but that's simply	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	until Tuesday when it's on the agenda. CHAIRMAN NELSON: Let me just ask both of the parties from a procedural and timeline standpoint do you see any issues with us waiting until Tuesday? Xcel. MS. VALLEY: No, Commissioner. That should work for us. CHAIRMAN NELSON: Staff. MS. CREMER: And that would work for us. Thank you. CHAIRMAN NELSON: Okay. With that, I believe the consensus of opinion is that we will take this up again at our regular meeting on Tuesday. I believe it's scheduled first at that meeting. With that, anything else for the good of the
3 failed to prove that Nobles is a cost 4 Staff understands the policition 5 adjoining states are not controlled by adjoining state planning by relied upon the integrated resource it is a beneficial and efficient planning However, as stated by Ms 10 cannot apply to certain policies. 11 Nobles was built based on which is for lack of a better word expectation its surrounding state policies. And of the bill leading to the Minnesota answering our questions and not Xo	reffective resource. cy mandates of cy Xcel. Also, Xcel c that works. Xcel has planning approach and ng model. Maini, this model another state's policy ctreme compared to perhaps the sponsors ROE should be tel but that's simply	3 4 5 6 7 8 9 10 11 12 13 14 15	parties from a procedural and timeline standpoint do you see any issues with us waiting until Tuesday? Xcel. MS. VALLEY: No, Commissioner. That should work for us. CHAIRMAN NELSON: Staff. MS. CREMER: And that would work for us. Thank you. CHAIRMAN NELSON: Okay. With that, I believe the consensus of opinion is that we will take this up again at our regular meeting on Tuesday. I believe it's scheduled first at that meeting.
4 Staff understands the police 5 adjoining states are not controlled to establishes a way of doing business relied upon the integrated resource it is a beneficial and efficient planni However, as stated by Ms cannot apply to certain policies. 10 Nobles was built based on which is for lack of a better word exits surrounding state policies. And of the bill leading to the Minnesota answering our questions and not Xo	cy mandates of cy Xcel. Also, Xcel c that works. Xcel has planning approach and ng model. Maini, this model another state's policy ctreme compared to perhaps the sponsors ROE should be tel but that's simply	4 5 6 7 8 9 10 11 12 13 14 15	see any issues with us waiting until Tuesday? Xcel. MS. VALLEY: No, Commissioner. That should work for us. CHAIRMAN NELSON: Staff. MS. CREMER: And that would work for us. Thank you. CHAIRMAN NELSON: Okay. With that, I believe the consensus of opinion is that we will take this up again at our regular meeting on Tuesday. I believe it's scheduled first at that meeting.
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 13 its surrounding state policies. And 14 of the bill leading to the Minnesota 15 answering our questions and not Xo 	perhaps the sponsors ROE should be cel but that's simply	13 14 15	again at our regular meeting on Tuesday. I believe it's scheduled first at that meeting.
14 of the bill leading to the Minnesota15 answering our questions and not Xo	ROE should be tel but that's simply	14 15	scheduled first at that meeting.
15 answering our questions and not Xo	el but that's simply	15	
,			With that anything else for the good of the
16 not how the world works.	when policy the	4.	with that, anything else for the good of the
	when policy the	16	order today?
17 There is certainly a limit to	when policy, the	17	Seeing none, is there a Motion?
18 costs associated with the policy sho	uld be shared amongst	18	COMMISSIONER HANSON: Mr. Chairman, I'll move
19 the states in which Xcel operates in	, and Staff believes	19	that we adjourn.
20 this is one of those times.		20	CHAIRMAN NELSON: All those in favor say aye.
21 As such, Staff asks the Co	mmission to completely	21	Commissioner Hanson.
22 disallow the recovery of the Nobles	Wind Project under	22	COMMISSIONER HANSON: Aye.
23 traditional rate-making principles o	r, in the	23	CHAIRMAN NELSON: Commissioner Fiegen.
24 alternative, to adopt an alternative	principle of	24	COMMISSIONER FIEGEN: Fiegen says aye.
25 benefits recognition and cost disallo	wance consistent	25	CHAIRMAN NELSON: Nelson votes aye. We are
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1 with Staff's recommended alternati	ve.	1	adjourned.
2 Thank you.		2	(The hearing is concluded at 1:25 p.m.)
3 MR. SMITH: Ms. Valley, d	o you have anything to	3	
4 add?		4	
5 MS. VALLEY: No. Thank	•	5	
6 MR. SMITH: Okay. Well,		6	
7 concludes the evidentiary portion o	the hearing. And a	7	
8 little beyond that, in fact.		8	
9 And at this point I'm going		9	
10 Commissioners for direction as to w	5 5	10	
11 turn it back over to you, Mr. Chairn	nan, at this point I	11	
12 think is what I'll do.	alcuau Mr Craith At a	12 13	
13 CHAIRMAN NELSON: Tha	, .	14	
14 minimum I'd like to take maybe a 415 confer with my advisors. I believe		15	
16 probably move forward with a vote		16	
	would appreciate your		
	. I have an inclination to		
22 with Tuesday. It's on the agenda for		22	
23 inclined to work it at that point.	n rucsuuy anu ru De	23	
24 CHAIRMAN NELSON: Con	nmissioner Fiegen	24	
25 COMMISSIONER FIEGEN:	_	25	
 17 waiting until Tuesday but certainly 18 all's thoughts. 19 COMMISSIONER HANSON 20 wait until Tuesday. I certainly can 21 some things I'd like to review but I' 	: I have an inclination to well, there are	17 18 19 20 21	

281 STATE OF SOUTH DAKOTA) 2 **CERTIFICATE** :SS 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 13th and 14th days of June, 2012, and that the attached is a true and 11 12 correct transcription of the proceedings so taken. 13 Dated at Onida, South Dakota this 2nd day of 14 July, 2012. 15 16 17 18 Cheri McComsey Wittler, Notary Public and 19 Registered Professional Reporter Certified Realtime Reporter 20 21 22 23 24 25

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