

BEFORE THE MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS  
600 North Robert Street  
St. Paul, MN 55101

FOR THE MINNESOTA PUBLIC UTILITIES COMMISSION  
121 7<sup>th</sup> Place East, Suite 350  
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IN THE MATTER OF THE PETITION OF  
NORTHERN STATES POWER COMPANY  
D/B/A XCEL ENERGY FOR APPROVAL OF  
COMPETITIVE RESOURCE ACQUISITION  
PROPOSAL AND CERTIFICATE OF NEED

Docket No. E002/CN-12-1240  
OAH Docket No. 8-2500-30760

**REBUTTAL TESTIMONY OF SACHIN SHAH**

**ON BEHALF OF**

**THE DIVISION OF ENERGY RESOURCES OF  
THE MINNESOTA DEPARTMENT OF COMMERCE**

**OCTOBER 18, 2013**

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1 **I. INTRODUCTION**

2 **Q. Please state your name.**

3 A. My name is Sachin Shah.

4  
5 **Q. Are you the same Sachin Shah who previously submitted testimony in this**  
6 **proceeding on behalf of the Minnesota Department of Commerce, Division of**  
7 **Energy Resources, Energy Regulation and Planning unit (Department or DOC)?**

8 A. Yes.

9  
10 **II. PURPOSE**

11 **Q. What is the purpose of your Rebuttal Testimony?**

12 A. My Rebuttal Testimony responds to the testimony of Mr. Steven W. Wishart of Northern  
13 States Power Company, a Minnesota Corporation d/b/a Xcel Energy (Xcel) related to the  
14 reasonableness of the sales forecast used by Xcel in this proceeding.

15  
16 **Q. What does Mr. Wishart state regarding the sales forecast he used?**

17 A. Mr. Wishart explains that Xcel used the spring 2013 forecast as a starting point in its base  
18 model. I set forth several statements of Mr. Wishart in this regard. At page 2 of his  
19 Direct Testimony, beginning at line 5, Mr. Wishart states the following:

20 Q. PLEASE SUMMARIZE YOUR TESTIMONY.

21  
22 A. I first review the Company's resource need assessment  
23 presented in our April 15, 2013 proposal filing, and then I  
24 present an assessment based on updated information  
25 regarding load and available resources. This update shows  
26 we have a capacity need of 93 MW in 2017 that grows to  
27 307 MW by 2019. However, we note that changes in

MISO's reserve margin standards may reduce our need to only 26 MW by 2019. Given this uncertainty, I recommend that after the least cost projects are selected through this process, the question of total capacity need and project timing be revisited in 2014 and in 2015 as more information becomes available.

Also, at pages 7 through 8, beginning at line 6, of his Direct Testimony, Mr. Wishart, comparing the capacity need forecasted in its most recent Commission-approved resource plan docket with the spring 2013 forecast, states the following:

Q. SINCE THE COMMISSION'S MARCH 2013 ORDER, HAS THE COMPANY REASSESSED ITS CAPACITY NEED FORECAST?

A. Yes. As part of our regular business process we update our capacity need assessment as new information becomes available. Our most current capacity assessment – September 2013 Update- is presented below in Table 2. Table 2 shows a comparison between the September 2013 Update and the assessment used in the Resource Plan Docket.

**Table 2 – September 2013 – Resource Need Assessment**

	Resource Plan Docket			September 2013 Update			Change		
	2017	2018	2019	2017	2018	2019	2017	2018	2019
Peak	9,613	9,708	9,799	9,500	9,590	9,676	-112MW	-112MW	-123MW
RM%	<u>3.8%</u>	<u>3.8%</u>	<u>3.8%</u>	<u>3.8%</u>	<u>3.8%</u>	<u>3.8%</u>	<u>0.0%</u>	<u>0.0%</u>	<u>0.0%</u>
<b>Total Obligation</b>	<b>9,977</b>	<b>10,076</b>	<b>10,170</b>	<b>9,860</b>	<b>9,953</b>	<b>10,042</b>	<b>-117MW</b>	<b>-123MW</b>	<b>-128MW</b>
Resources									
Coal	2,331	2,331	2,331	2,367	2,367	2,367	36	36	36
Nuclear	1,610	1,610	1,610	1,623	1,623	1,623	12	12	12
Gas	3,437	3,424	3,424	3,427	3,416	3,416	(9)	(8)	(8)
Wind, Hydro, Bio	1,280	1,229	1,202	1,238	1,189	1,162	(42)	(40)	(40)
Solar	9	10	11	49	66	83	40	56	72
Load Management	<u>1,157</u>	<u>1,153</u>	<u>1,149</u>	<u>1,063</u>	<u>1,074</u>	<u>1,085</u>	(95)	(79)	(65)
<b>Total Resources</b>	<b>9,824</b>	<b>9,758</b>	<b>9,728</b>	<b>9,768</b>	<b>9,735</b>	<b>9,735</b>	<b>(57)</b>	<b>(23)</b>	<b>8</b>
<b>Long (Short)</b>	<b>(153)</b>	<b>(318)</b>	<b>(443)</b>	<b>(93)</b>	<b>(218)</b>	<b>(307)</b>	<b>+60MW</b>	<b>+100MW</b>	<b>+136MW</b>

1 The September 2013 Update indicates a generating  
2 capacity deficit of 93 MW starting in 2017, which grows to  
3 307 MW by 2019. The update includes;

- 4 1) New spring 2013 load forecast
- 5 2) Updated unit capacity ratings
- 6 3) Minnesota Solar Mandate
- 7 4) Updated forecast of load management resources

8  
9 Table 2 does not include MISO's new reserve margin  
10 requirements or calculation methodology that was  
11 introduced for use in 2013. Instead our updated resource  
12 need assessment uses the same reserve margin that was  
13 used in the Resource Plan.  
14

15 Finally, at page 21, beginning at line 10, of his Direct Testimony, Mr. Wishart states the  
16 following:

17 Q. WHAT ARE SOME OF THE SPECIFIC INPUT  
18 ASSUMPTIONS USED IN THE STRATEGIST  
19 ANALYSIS?  
20

21 A. We started with the same base model that we used in our  
22 recent wind RFP analysis. That Strategist model included  
23 the following important input assumptions:  
24

- 25 1. Load Forecast – The load forecast used in this model  
26 was developed in the spring of 2013 and reflects our  
27 most current assessment of the impacts of conservation  
28 (DSM) on total customer demand. The forecasted peak  
29 demand during the resource acquisition period is 9,500  
30 MW in 2017, 9,590 MW in 2018, and 9,676 MW in  
31 2019.  
32
- 33 2. Load Management Forecast – The forecast of load  
34 management or direct load control programs was  
35 developed in spring of 2013. Total load management is  
36 985 MW in 2013 and grows at an average rate of 1%  
37 annually through 2020 reaching 1056 MW in that year.  
38
- 39 3. Reserve Margin – To set reliability standards, the  
40 model uses a reserve margin of 3.8% as established in  
41 MISO's November 2011 loss of load expectation  
42 (LOLE) report.

1 **Q. Do you agree with Mr. Wishart that it was reasonable for Xcel to use of the spring**  
2 **2013 forecast as a starting point in Xcel's base model?**

3 A. No. For all the reasons set forth in my Direct Testimony, which I will not repeat here, I  
4 conclude that the fundamental goal in certificate of need and resource planning  
5 proceedings is not to establish a plan that is least-cost under a single forecast but for the  
6 plan to be least-cost across a wide range of forecasts. Given that goal, the concerns I  
7 discussed in my Direct Testimony, the Commission's decision not to require continual  
8 updating of forecasts in the 2010 IRP (i.e. that the need was based on using the fall 2011  
9 forecast), and the fact that the spring 2013 forecast was within the 5 percent contingency  
10 modeled, I conclude that Department Witness Dr. Steve Rakow's use of the fall 2011  
11 forecast as a starting point to begin his analysis of assessing the bids is reasonable. See  
12 pages 3 through 14 of my Direct Testimony DOC Ex. \_\_\_ at 3-14 (Shah Direct) for more  
13 discussion.

14  
15 **III. CONCLUSIONS**

16 **Q. Please provide your conclusions at this time.**

17 A. From my limited review, as explained in my Direct Testimony, I continue to conclude,  
18 first, that Xcel's spring 2013 forecast is within the range of forecasts that Department  
19 Witness Dr. Steve Rakow uses in his analysis. Second, I continue to conclude that Dr.  
20 Rakow's use of the Company's fall 2011 forecast provided in Xcel's 2010 IRP that was  
21 relevant to the Commission's determination of need in this present docket is the  
22 appropriate forecast to use to evaluate the bids provided in this proceeding for all of the  
23 reasons discussed in my Direct Testimony.

1 | **Q. Does this conclude your Rebuttal Testimony?**

2 | A. Yes.