

BEFORE THE NORTH DAKOTA PUBLIC SERVICE COMMISSION  
STATE OF NORTH DAKOTA

In the Matter of the Application of Northern States Power Company for an  
Advance Determination of Prudence for a 200 MW Power Purchase Agreement  
with the Courtenay Wind Project  
Case No. PU-13-706  
Exhibit \_\_\_(LM-2)

In the Matter of the Application of Northern States Power Company for an  
Advance Determination of Prudence for a 200 MW Power Purchase Agreement  
with the Odell Wind Project  
Case No. PU-13-707  
Exhibit \_\_\_(LM-2)

In the Matter of the Application of Northern States Power Company for an  
Advance Determination of Prudence for the 200 MW Pleasant Valley Wind Project  
Case No. PU-13-708  
Exhibit \_\_\_(LM-2)

In the Matter of the Application of Northern State Power Company for an  
Advance Determination of Prudence for the 150 MW Border Winds Project  
Case No. PU-13-742  
Exhibit \_\_\_(LM-2)

In the Matter of the Application of Northern State Power Company for a  
Certificate of Public Convenience & Necessity for the 150 MW Border Winds  
Project  
Case No. PU-13-743  
Exhibit \_\_\_(LM-2)

**Project Need and Costs, Impact of Minnesota Regulatory Requirements,  
and Cost Recovery Mechanism Testimony**

32 PU-13-742 Filed 10/31/2013 Pages: 23  
Exhibit 7

31 PU-13-708 Filed 10/31/2013 Pages: 23  
Exhibit 7  
Northern States Power Company

31 PU-13-707 Filed 10/31/2013 Pages: 23  
Exhibit 7  
Northern States Power Company

October 21, 2013

31 PU-13-706 Filed 10/31/2013 Pages: 23  
Exhibit 7  
Northern States Power Company



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### Schedules

September 26, 2013 Reply Comments in MPUC Docket Nos. E002/M-13-603 and 716	Schedule 1
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2  
3 **I. INTRODUCTION**

4 Q. PLEASE STATE YOUR NAME AND TITLE.

5 A. My name is Laura McCarten. I am Regional Vice President for Northern  
6 States Power Company.

7 Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY IN THESE PROCEEDINGS?

8 A. Yes, I described our proposal to acquire 750 MW of additional wind  
9 generating resources for the Xcel Energy integrated system, and reviewed the  
10 prudence and regulatory impacts of the acquisition. I also introduced the  
11 other witness testifying on behalf of the Company in these proceedings.

12  
13 Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

14 A. I address concerns raised in the Direct Testimony of Ms. Sara Cardwell on  
15 behalf of the Advocacy Staff of the North Dakota Public Service Commission  
16 regarding:

- 17 • Advocacy Staff's recommendation in this proceeding;
- 18 • the impacts of Minnesota regulatory requirements on North Dakota; and
- 19 • the prudence of a cost recovery mechanism providing greater ratepayer  
20 protection.

21  
22 **II. ADVOCACY STAFF RECOMMENDATIONS**

23  
24 Q. WHAT IS THE COMPANY'S RESPONSE TO ADVOCACY STAFF'S  
25 RECOMMENDATIONS WITH RESPECT TO THE COMPANY'S PROPOSED WIND

1 ADDITIONS?

2 A. We appreciate Advocacy Staff's acknowledgment that our proposals to enter  
3 into PPAs with the Courtenay and Odell projects and to own the Border  
4 Winds and Pleasant Valley Projects are at very attractive pricing which will  
5 accrue to the benefit of our North Dakota customers. We conservatively  
6 project that the cost savings on a net present value basis from all four projects  
7 will amount to \$219 million over 25 years, which are significant savings that  
8 demonstrate the prudence of acquiring these resources to lower the  
9 operational costs of our system going forward.

10  
11 However, we disagree with Advocacy Staff's recommendation that the  
12 Commission not grant an Advanced Determination of Prudence (ADP) for  
13 our proposal to own the Pleasant Valley project due to the extra initial costs of  
14 ownership. Our analysis of the this project identifies a long-term net *reduction*  
15 in rates for customers from 2019 onward for this project. These savings more  
16 than offset the projects' initial costs by approximately \$88 million over 25  
17 years on a net present value basis. A fair characterization of the Company's  
18 proposal is that it involves a short-term (3 year) increase in rates to secure a  
19 long-term (22 year) net reduction in rates for our North Dakota customers.  
20 For this reason, we believe all four of our proposed acquisitions are prudent  
21 and each should be approved.

22  
23 Further, our proposal to work with Advocacy Staff to develop a mechanism  
24 that will mitigate the cost impacts of the Company-owned projects while  
25 securing for our North Dakota customers additional unforeseen benefits

1 should they arise should help to allay Advocacy Staff's concerns with respect  
2 to our ownership of the Pleasant Valley project and further argues for the  
3 Commission to grant an ADP for all four of our proposed wind additions.  
4

### 5 **III. IMPACTS OF MINNESOTA REGULATORY REQUIREMENTS**

6

7 Q. WHAT IS THE COMPANY'S POSITION REGARDING MINNESOTA'S RENEWABLE  
8 ENERGY REQUIREMENTS IMPACTING NORTH DAKOTA CUSTOMERS?

9 A. Xcel Energy's service territory includes areas of North Dakota, South Dakota,  
10 Minnesota, Wisconsin, and Michigan, and thus the operation of the Xcel  
11 Energy system is subject to the regulatory oversight of five state public service  
12 commissions. We therefore must pursue opportunities to reduce costs for all  
13 our customers while also complying with the regulatory requirements of all of  
14 the jurisdictions served by our five-state integrated system.  
15

16 As noted in my Direct Testimony in this case, the Company is proposing  
17 these projects because they will provide low-cost energy that will keep our  
18 customers bills lower than they would otherwise be. The fact that the projects  
19 allow us to extend our compliance with Minnesota's Renewable Energy  
20 Resources is an additional benefit.  
21

22 Q. WHAT ABOUT CONCERN THAT THE COMPANY IS REQUIRED BY MINNESOTA TO  
23 PURSUE C-BED PROJECTS THAT ARE OFTEN HIGHER-COST THAN NON-C-BED  
24 PROJECTS?

25 A. The issue of whether the Company is required to pursue higher-cost C-BED

1 projects was raised in the Minnesota proceedings that parallel these  
2 proceedings on our proposed wind projects. In that proceeding, the  
3 Company explained that it is in fact required in all of its acquisitions of  
4 resources to evaluate all proposals on an equivalent basis regardless of the  
5 proposals structure, including whether it is structured as a C-BED project.  
6 For this reason, no higher-priced C-BED projects were proposed by the  
7 Company in these proceedings. See pages 7 and 8 of the Company's  
8 comments in the Minnesota proceeding, which are included as  
9 Exhibit\_\_\_(LM-2), Schedule 1 to my Rebuttal Testimony

#### 11 IV. COST RECOVERY MECHANISM

12  
13 Q. WHAT IS THE COMPANY'S POSITION WITH RESPECT TO ADVOCACY STAFF'S  
14 PROPOSAL THAT THE COMMISSION ADOPT THE COST RECOVERY APPROACH  
15 FOR THE COMPANY-OWNED PROJECTS THAT THE COMPANY IS PURSUING WITH  
16 THE MINNESOTA CHAMBER OF COMMERCE FOR THE PLEASANT VALLEY AND  
17 BORDER WINDS PROJECTS?

18 A. We look forward to working with Advocacy Staff to determine a recovery  
19 mechanism for the Pleasant Valley and Border Winds projects that shares the  
20 benefits of those projects outperforming current estimates between the  
21 Company and ratepayers, and helps mitigate any rate impacts due to project  
22 costs exceeding estimates or underperformance.

23 Q. HOW WOULD THE MECHANISM BE DEVELOPED?

24 A. We propose developing the mechanism along the same timeline detailed in  
25 Exhibit F to Ms. Cardwell's testimony, with work on developing the

1 mechanism beginning in January 2014 and being completed in the first quarter  
2 2015. This will give the Commission time to review and approve the  
3 mechanism before the projects' in-service dates in late 2015.

4

5 Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

6 A. Yes, it does.

1 STATE OF NORTH DAKOTA  
2 BEFORE THE  
3 PUBLIC SERVICE COMMISSION  
4  
5

6 In the Matter of the Application of Northern ) Case No. PU-13-706  
7 States Power Company for an Advance )  
8 Determination of Prudence for a 200 MW Power )  
9 Purchase Agreement with Courtenay Wind Project )

10  
11 In the Matter of the Application of Northern ) Case No. PU-13-707  
12 States Power Company for an Advance )  
13 Determination of Prudence for a 200 MW Power )  
14 Purchase Agreement with Odell Wind Project )

15  
16 In the Matter of the Application of Northern ) Case No. PU-13-708  
17 States Power Company for an Advance )  
18 Determination of Prudence for a 200 MW Power )  
19 Purchase Agreement with Pleasant Valley Wind )  
20 Project )

21  
22 In the Matter of the Application of Northern ) Case No. PU-13-742  
23 States Power Company for an Advance )  
24 Determination of Prudence for a 150 MW Power )  
25 Purchase Agreement with Border Winds Project )

26  
27 In the Matter of the Application of Northern ) Case No. PU-13-743  
28 States Power Company for a Certificate of Public )  
29 Convenience & Necessity for the 150 MW Border )  
30 Winds Project )

31  
32 **AFFIDAVIT OF**  
33 **Laura McCarten**  
34

35 I, the undersigned, being duly sworn, depose and say that the foregoing is  
36 the Rebuttal Testimony of the undersigned, and that such Rebuttal Testimony and  
37 the exhibits or schedules sponsored by me to the best of my knowledge,  
38 information and belief, are true, correct, accurate and complete, and I hereby adopt  
39 said testimony as if given by me in formal hearing, under oath.  
40

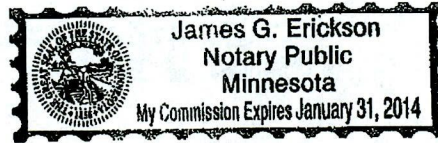
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Laura McCarten

Laura McCarten

Subscribed and sworn to before me, this 21<sup>st</sup> day of October 2013.

*J. G. Erickson*  
Notary Public





414 Nicollet Mall  
Minneapolis, Minnesota 55401-1993

September 26, 2013

Burl W. Haar  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7th Place East, Suite 350  
St. Paul, Minnesota 55101

- Via Electronic Filing -

RE: REPLY COMMENTS  
PROPOSED ACQUISITION OF 600 MW OF WIND GENERATION; AND  
PROPOSED ACQUISITION OF 150 MW OF WIND GENERATION  
DOCKET NOS. E002/M-13-603 AND E002/M-13-716

Dear Dr. Haar:

Northern States Power Company, doing business as Xcel Energy, submits to the Minnesota Public Utilities Commission its Reply Comments in the above-referenced dockets.

We have electronically filed this document with the Commission, which also constitutes service on the Department of Commerce and the Office of the Attorney General. A copy of this filing has been served on all parties on the official service lists in these dockets.

Please contact me at (612) 330-6742 or [james.r.alders@xcelenergy.com](mailto:james.r.alders@xcelenergy.com) if you have any questions regarding this filing.

Sincerely,  
/s/

JAMES R. ALDERS  
STRATEGY CONSULTANT  
Regulatory Affairs

Enclosure  
c: Service Lists

STATE OF MINNESOTA  
BEFORE THE  
MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger	Chair
David Boyd	Commissioner
Nancy Lange	Commissioner
J. Dennis O'Brien	Commissioner
Betsy Wergin	Commissioner

IN THE MATTER OF THE PETITION OF  
NORTHERN STATES POWER COMPANY  
FOR APPROVAL OF THE ACQUISITION OF  
600 MW OF WIND GENERATION

DOCKET NO. E002/M-13-603  
E002/M-13-716

**REPLY COMMENTS**

**INTRODUCTION**

Northern States Power Company, doing business as Xcel Energy, submits to the Minnesota Public Utilities Commission these Reply Comments in response to the Comments on the merits of our proposal submitted in these dockets. Comments were filed by the Minnesota Department of Commerce, Minnesota Chamber of Commerce, Geronimo Energy, Joint CBED Intervenors,<sup>1</sup> and Sorgo Fuels.

We address the Parties issues in detail below. In summary:

- The proposed acquisitions are cost-effective for customers under any scenario;
- The wind resources will not impact the capacity need addressed in the Competitive Acquisition Docket, MPUC Docket No. E002/M-12-1240;
- The impacts of these projects on baseload cycling and with respect to transmission risk have been incorporated into the analysis; and
- The competitive bidding process used to select these proposed resources was robust and fair and appropriately considered C-BED projects.

The record in this proceeding is thorough and supports that the proposed wind acquisitions are good investments for our customers and will contribute to the long-term achievement of the Renewable Energy Standard set forth in Minn. Stat. § 216B.1691. The Company respectfully requests the Commission approve our petitions submitted in these dockets.

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<sup>1</sup> Joint CBED Intervenors includes Ecos Energy, LLC; Summit Wind LLC; Jeffers South LLC; Hurricane Wind LLC; Garvin Wind LLC; Gadwall Wind LLC; Greenhead Wind LLC; Watonwan Wind LLC; and Highwater Wind LLC.

**REPLY**

**A. The Proposed Wind Acquisitions Are Cost-Effective**

Under every scenario, the addition of these resources, provide significant net benefits for our customers. The Department conducted its own independent Strategist analysis, completing 1,859 different Strategist runs, and found customer benefit under a broad range of assumptions, both with and without consideration of the cost of future carbon regulation. We appreciate the Department's thorough review of our proposal to add 750 MW of wind resources to our system.

Wind generation is primarily an energy production resource that operates in concert with the rest of the Company's fleet of generation. The cost of wind energy is attractive when it is less expensive than the electricity that is not produced elsewhere because of wind energy deliveries. There are many hours during the year when wind generated electricity is cheaper than the fossil based generation that would have been required otherwise. There are also some hours when the cost of wind power is higher than the alternative. Strategist simulates system operation and sums the positive and negative hourly cost impacts and estimates net effect. Both our analysis and the Department's find substantially lower energy costs over the life of the projects compared to operation without the wind additions. The table below shows the net benefit to our customers over the life of the proposed projects on a present value basis. We project the avoided fossil fuel alone will more than offset the costs associated with the projects by a substantial amount.

**Present Value Results (\$millions)**

	<b>Pleasant Valley</b>	<b>Odell</b>	<b>Courtenay</b>	<b>Border</b>
Revenue Requirements	\$233	\$191	\$180	\$178
Wind Integration	\$31	\$25	\$24	\$23
Congestion/Line Losses	\$10	\$26	\$17	\$24
Avoided Fossil Fuel	(\$390)	(\$319)	(\$302)	(\$283)
Capacity Credit	(\$13)	(\$12)	(\$11)	(\$10)
Avoided CO2	(\$83)	(\$70)	(\$63)	(\$63)
Net Cost (Benefit)	(\$212)	(\$158)	(\$156)	(\$131)

## **B. The Wind Acquisition is not Proposed to Meet a Capacity Need**

We submit the wind acquisitions identified here for approval due to the net benefits identified above. We do not propose these resources to respond to a generating capacity deficiency. Our analysis and that of the Department demonstrates that system production costs are lower with the energy delivered from these projects regardless of the capacity selections made in Docket 12-1240 or the solar additions resulting from the new solar mandate.

While the Minnesota Chamber of Commerce and Joint C-BED Intervenors express concern that there is significant interaction between the selection of generating capacity in Docket No. E002/M-12-1240 and the addition of 750 MW of wind generation proposed here; both ignore that these wind additions will provide customer benefit regardless of the capacity selections made in Competitive Acquisition.

We explained in our initial petition that the proposed wind acquisition would not impact the need addressed in Docket No. E002/M-12-1240 but could impact the type of resource selected. In its analysis, the Department examined 153 combinations of resource selections and tested each combination in several ways to assess the impact of the wind additions we propose. The Department conducted sensitivity tests to explore the impact of several key assumptions in their modeling, such as varying energy and demand forecasts, gas forecasts, and anticipated carbon regulation costs. Their results tabulated in Appendix D of their comments identify benefit under all scenarios. The Department's analysis further demonstrates that these wind power additions will improve system production economics regardless of other generation decisions we make in the foreseeable future.

In addition, our selections were not motivated one way or the other by the ability to receive reserve credit. Very few if any wind proposals are located where accreditation can come earlier. Only a few of the wind projects with prices below our screening threshold are anticipated to receive reserve credit sooner. This is because MISO's analysis indicates that major regional system improvements are needed to support accreditation. Full output must be deliverable at all times to receive reserve credit. The necessary transmission improvements were identified and approved by MISO as part of the program of MVP transmission lines. Those regional transmission improvements are scheduled to be completed by 2021. Until that time, our wind projects will be able to deliver energy during most system conditions, but will not qualify for capacity credits.<sup>2</sup>

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<sup>2</sup> Wind generation provides very little (and in this case, because of transmission constraints, no early) accredited capacity toward the Company's reserve margin obligations. The Company purchases wind power

Joint C-BED Intervenors also express concern that these wind resources were being added to the detriment of solar generation. The Department included an estimate of the solar generation needed to comply with the new solar mandate in its analysis. The solar mandate established in legislation this year requires that an additional 1.5 percent of total retail sales be generated from solar resources and is in addition to our existing requirement to meet 25 percent of sales with wind energy. The acquisition of wind resources does not reduce in any way the amount of new solar resources that must be added to the Company's system. Furthermore, as shown by the Department's analysis, these wind additions continue to provide benefit with mandated solar energy in the system.

### **C. The Net Benefits Analysis Includes the Cost of Cycling Other Facilities**

The Minnesota Chamber of Commerce expresses concern that the true cost of following the variable output of wind generation by ramping the production at base load fossil plants up and down is unknown but could be significant. However, the Company includes a conservative estimate of the cost impacts on other facilities due to cycling in our analysis. Our Strategist analysis included an average of \$8.5 million a year to account for wind integration and the Department's analysis included a figure even higher. Even with very conservative assumptions, the analysis demonstrates customer benefits with ample remaining margin for error.

We have taken the cycling issue very seriously as more and more wind power is incorporated into our system and have commissioned engineering investigations at each of our major power plants to examine the effects of cycling on major plant systems. The study work provides estimates of some potential cycling costs but does not assign costs to wind variability, load variability or other system operating circumstances.

Our study work identified a series of recommendations to minimize the potential cost of cycling. Many of the recommendations identified have been incorporated into our operations. For example, one of the largest potential mechanisms for cost impacts is metal fatigue associated with rapid temperature changes that occurs with rapid changes in power output. We have put in place limits on the rate at which our baseload plants can ramp power output up or down to keep fatigue in check and we have incorporated those limits in our offers in the MISO market. MISO then

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from over 1400 megawatts of wind turbines and produces power at another 400 MW of wind turbines we own. We receive credit toward reserve requirements for 13.3 % of those nameplate power ratings, approximately 200 MW of our nearly 1000MW reserve obligation. The 750 MW of acquisitions we propose will in time increase our wind related reserve credit to about 300 MW, still a relatively small portion of our reserve. Because wind generation receives such low capacity credit, it remains a lesser portion of our reserve and the calculation does not threaten the reliability of the regional power system.

dispatches our plants with those limitations in ramp rates.<sup>3</sup> We agree that this is an issue that will merit additional study and monitoring as wind penetration continues to grow.

Wind integration costs are used to represent additional operating reserves that are necessary to support variable wind generation. Operating reserves are basically generation resources that are available to respond quickly to changes in wind generation and are necessary to keep the electric grid in balance. MISO currently operates an ancillary services market (ASM) to provide operating reserves. At current market prices we estimate that necessary operating reserves would average only \$1.1 million over the lifetime of the projects. Thus the difference between the input assumptions used and actual market conditions provides a considerable margin to reflect plant cycling costs.

#### **D. Transmission Risk**

We have addressed transmission risk in the final agreements. The proposed PPAs shift the risk associated with transmission interconnection and delivery to the developer. The Pleasant Valley and Border Winds agreements include substantial provision for transmission improvements at the developer's expense. Our build transfer agreements allow us to terminate the projects if interconnection costs become too high.

While the Department fully supports our proposals, they express some reservation about the proper way to pursue cost recovery for transmission interconnection costs in the event they exceed certain levels specified in the contracts. The Department reserves judgment on whether those costs, if incurred, should be allowed in recovery until subsequent presentation of reasonableness to the Commission. In response to the Department's suggestion that transmission interconnection costs above those in their comments may not be prudent and should not be recovered in rates without first demonstrating their reasonableness, we would like to clarify that transmission costs would have to be substantially higher than the termination option levels in contracts before customer benefits are completely consumed. The thresholds in our contracts are not set at a point where the projects might no longer be economical if transmission exceeds them. Instead they reflect the result of negotiation that started with the cost of transmission that was incorporated into the proposal. The Company

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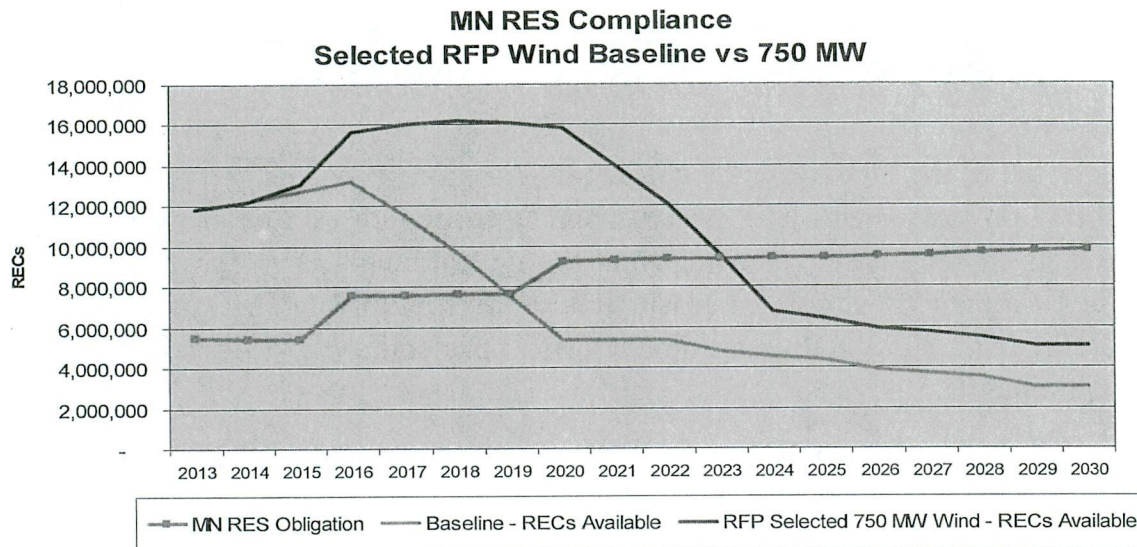
<sup>3</sup> In addition, one of the benefits of a large, well integrated MISO market is that all the region's assets can be dispatched in the best possible way to accommodate changing wind power patterns. Said another way, there is considerable capability to absorb wind variability in the MISO market without adverse operating conditions imposed on any one or group of plants. Those benefits were part of the motivation for the MVP portfolio of bulk transmission line improvements approved by MISO and now under development. They allow larger regional power transfers and more operating flexibility with fewer congestion limitations.

endeavored to keep the thresholds as low as possible to maximize our flexibility to respond once the MISO interconnection process better defines cost responsibility. As presented in our petition, we estimated that net customer benefit can still be had with the Border Winds project even if network interconnection requirements approached \$50 million. Although the transmission analysis is preliminary with respect to Borders, the Definitive Planning Phase (DPP) study is now in progress per standard MISO procedures for new generators and will be completed toward the end of the year.

If the Commission has concern about the way in which we might exercise or forego termination rights associated with interconnection costs in the PSAs, we could update the Commission before taking action. We could provide the Commission with our assessment of interconnection costs once they are better known and our plan to exercise or forego any associated termination rights. A short period of time could be provided to hear any comment and receive any Commission guidance.

#### **E. RES Compliance**

The Minnesota Chamber of Commerce and Joint C-BED Intervenors are correct that we can meet RES compliance milestones with the energy produced by existing wind turbines through approximately 2019. However, as shown below from the figures included in our petitions, by 2020 we will need nearly 4 million megawatt-hours of wind energy above current contracts and production levels to meet compliance requirements. Assuming a 40 percent capacity factor, more than 1,100 megawatts of nameplate wind generation is required to produce that nearly 4 million megawatt-hours of electricity. On an allocated basis, this would be approximately 1,500 megawatts of wind generation. Substantial wind acquisitions are needed to maintain compliance with the standard.



As shown in the graph, new wind acquisitions we propose do increase the number of compliance RECs above those needed for annual compliance in coming years. Those RECs are banked as provided in the Commission’s compliance Orders and can be used to demonstrate compliance within 4 subsequent years. Each year the oldest available RECs are retired to demonstrate compliance and new RECs are credited. Using this first in – first out approach does not result in any RECs being older than the 4 years in the bank. In other words, no RECs will “expire” before they can be used to demonstrate compliance. The RECs associated with the purposes we propose are needed and will be used to comply with Minnesota’s Renewable Energy Standard.

**F. CBED**

The Commission’s June 19, 2009 Order provides clear guidance on how the Company must go about acquiring additional wind resources. With respect to the Company’s Renewable Energy Plan required under Minn. Stat. § 216B.1691, subd. 10, the Commission approved the plan’s allocation of projects among CBED, non-CBED, and utility-owned projects, *with the following qualifications:*

All parties have noted that this allocation could result in needless costs if Xcel were to begin picking projects solely on the basis of their ownership structures, and refrain from comparing the cost-effectiveness of a C-BED project with an IPP contract or utility-owned generator, for example. Fortunately, Xcel denies that it intends to acquire resources in this manner. As noted above, the renewable energy plan statute establishes the goals of promoting rural economic development, promoting transmission grid reliability, and minimizing ratepayer costs. Xcel offered its target allocations as one possible strategy for achieving these statutory goals. It would make

no sense for Xcel to pursue the strategy to the detriment of the goals. *To clarify this matter, the Commission will direct Xcel to evaluate all potential resources on an equivalent basis, regardless of the resources' ownership structures.*<sup>4</sup>

As noted in the Department's comments, the Company solicited and considered CBED projects in this RFP process, and appropriately declined to pursue any because of their higher additional costs, which would not be in our ratepayers' best interests.<sup>5</sup> The Company thus took the reasonable steps contemplated by Minn. Stat. § 216B.1612, subd. 5 to determine if CBED projects were available that met its cost requirements.

### **G. The Contract Price Appropriately Incorporates the Effect of PTCs**

Our analysis of Company owned projects accounts for all of the costs associated with our proposals and includes the benefits of production tax credits. We have used the actual contracted cost of electricity specified in PPAs and estimated revenue requirements based on the contracted sale price in the PSAs.

While Sorgo Fuels states the true cost of wind power is higher without the federal tax incentive, we believe it is prudent to take advantage of federal policies providing incentives for renewables so that the actual cost of wind generated electricity can be kept low, below \$30/MWh, which will keep customer bills lower. If we do not make the purchases now we risk higher customer cost as the result of changing federal incentive policies.

Our analysis also includes provision for the cost of curtailments and other system costs associated with the integration of a resource with variable output like wind generation. The Strategist model simulates how the system will operate with the addition of these projects and incorporates the cost of the generation that is used in concert with wind power.

We have also incorporated the transmission costs associated with these proposals as discussed in the Transmission risk section. By definition the MISO interconnection process ensure these facilities will be allowed to interconnect only if the reliability of the system can be maintained.

In summary we believe our analysis and the Departments have captured the issues Sorgo Fuels expresses concern about.

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<sup>4</sup> Docket No. E002/M-07-1558, Order Approving Target Portfolio Allocation Within Xcel's Renewable Energy Plan at 9-10 (June 19, 2009) (emphasis added).

<sup>5</sup> Department Comments at 18.

## H. Operating Risk

In the course of discussions with the Minnesota Chamber of Commerce about their comments, the Chamber expressed its concern about differences in operating risk between a wind farm operated by an independent power producer (IPP) under a PPA and a Company owned and operated project. The Chamber appears to be concerned that the customer bears the risk of unexpected operating or maintenance costs with Company ownership.

This balancing of risks and benefits was discussed at length when the Commission considered our Renewable Energy Plan in 2009. The Independent/PPA model does provide some insulation from operating risk but also does not share the benefits of lower cost O&M and has a fixed term. The wind energy must be replaced with a new PPA at the prevailing market prices when the PPA expires resulting in the risk of higher prices in the future. As shown in our petitions, Company ownership delivers significant benefits to customers during the course of operation in the form of PTC reductions in taxes and accelerated depreciation, as well as other factors. The Company owned facility is not subject to contract term limitations and will be operated for the benefit of customers as long as it is economic to do so. Thus, future, potentially more expensive, energy purchases can be deferred. When balancing the benefits and risks of the two models the Company proposed maintaining a portfolio of both in roughly equal amounts and the Commission agreed.<sup>6</sup>

We believe the wind industry has made considerable progress in the development of its generating technology and wind operators have almost two decades of experience. Both factors improve the knowledge base for estimating O&M and reduce risk. The Company has gained important direct experience in operating the Grand Meadow and Nobles wind farms. We believe we have a good knowledge base to make reasonable O&M estimates with minimal risk. When all the pros and cons are considered we do not believe operating risk outweighs the potential benefits we can provide customers with Pleasant Valley and Border Winds in our generation portfolio.

A regulated utility is not in a position to address operating risk in the same way an independent power supplier does. However we have successfully designed ratemaking mechanisms that provide incentives to align performance with customer value. For example we were able to reach agreement with stakeholders on ROE incentives to effectively manage the Metro Emission Reduction Program of power plant construction and we are exploring with the Department and other stakeholders ways in which incentives might be designed to manage expenses that are part of the fuel

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<sup>6</sup> Docket No. E002/M-07-1558, Order Approving Target Portfolio Allocation Within Xcel's Renewable Energy Plan (June 19, 2009)

clause. The Company is willing to continue discussions with the Minnesota Chamber of Commerce to explore how similar mechanisms might help address concerns about operating performance at Company owned wind facilities.

### CONCLUSION

Xcel Energy appreciates the opportunity to submit this Reply. The analysis we have submitted as well as that of the Department clearly demonstrate these wind acquisitions will provide significant benefits to our customers and will not adversely affect generation capacity decisions. These acquisitions are the result of a robust competitive acquisition process in which bidders were treated evenhandedly and fairly. All of the wind generated energy these projects will provide will be needed, over time, to comply with Minnesota's Renewable Energy Standard.

Xcel Energy respectfully requests, as provided in Minn. Stat. § 216B.1645, that the Commission determine the addition of Courtenay, Odell, Pleasant Valley and Border Winds projects, under the proposed PPAs and PSAs, are a reasonable and prudent way to meet our Minnesota Renewable Energy Standard obligations. We request the Commission authorize recovery of the costs incurred through the Odell and Courtenay PPAs through the Company's Fuel Clause Rider. If necessary, we also request the Commission grant appropriate rule variances and approve pursuant to Minn. Stat. § 216B.50 the acquisition of Pleasant Valley and Border Winds under the structure described in our petition.

Dated: September 26, 2013

Northern States Power Company

Respectfully submitted by:

/s/

JAMES A. ALDERS  
STRATEGY CONSULTANT  
RATES AND REGULATORY AFFAIRS

### CERTIFICATE OF SERVICE

I, SaGonna T. Thompson, hereby certify that I have this day served copies of the foregoing document on the attached list of persons.

by depositing a true and correct copy thereof, properly enveloped with postage paid in the United States mail at Minneapolis, Minnesota; or

by electronic filing.

MPUC Docket Nos.: E002/M-13-603 Service List  
E002/M-13-716 Service List

Dated this 26<sup>th</sup> day of September 2013.

/s/

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SaGonna T. Thompson

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_13-603_Official
Christina	Brusven	cbrusven@fredlaw.com	Fredrikson & Byron, P.A.	200 S 6th St Ste 4000  Minneapolis, MN 554021425	Electronic Service	No	OFF_SL_13-603_Official
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_13-603_Official
Benjamin	Gerber	bgerber@mnchamber.com	Minnesota Chamber of Commerce	400 Robert Street North Suite 1500 St. Paul, Minnesota 55101	Electronic Service	No	OFF_SL_13-603_Official
Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_13-603_Official
S Mike	Holly	4358@brainerd.net	Sorgo Fuels and Chemicals, Inc.	34332 Sunrise Blvd  Crosslake, MN 56442	Electronic Service	No	OFF_SL_13-603_Official
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_13-603_Official
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