

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE APPLICATION
OF NORTHERN STATES POWER
COMPANY FOR AN ADVANCE
DETERMINATION OF PRUDENCE FOR
THE 150 MW BORDER WINDS
PROJECT

Case No. PU-13-_____

IN THE MATTER OF THE APPLICATION
OF NORTHERN STATES POWER
COMPANY FOR A CERTIFICATE OF
PUBLIC CONVENIENCE AND
NECESSITY FOR THE 150 MW BORDER
WINDS PROJECT

Case No. PU-13-_____

APPLICATION FOR
ADVANCE DETERMINATION OF PRUDENCE AND
CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

INTRODUCTION

Northern States Power Company, doing business as Xcel Energy, submits to the North Dakota Public Service Commission this Application for an Advance Determination of Prudence pursuant to N.D.C.C. § 49-05-16 for additional generation to be added to the Xcel Energy System:

- The 150 MW Border Winds Project being developed by RES Americas in northeastern Rolette County, North Dakota, which upon completion will be transferred to the Company to own and operate. The 25-year levelized cost of electricity is calculated to be [TRADE SECRET BEGINS § ██████████ TRADE SECRET ENDS] assuming transmission costs do not exceed a specific threshold.

We are also requesting through this Application that the Commission grant a Certificate of Public Convenience and Necessity for the Project pursuant to North Dakota Century Code Chapter 49-03.

29 PU-13-742 Filed 10/31/2013 Pages: 20
Exhibit 4
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28 PU-13-707 Filed 10/31/2013 Pages: 20
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28 PU-13-708 Filed 10/31/2013 Pages: 20
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28 PU-13-706 Filed 10/31/2013 Pages: 20
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The Border Winds Project is a resource the Company identified for acquisition through its February 2013 Request for Proposals (RFP) for additional wind resources. On July 26, 2013, the Company requested an advance determination of prudence for three other wind resources identified through the RFP process – the 200 MW Courtenay and 200 MW Odell Power Purchase Agreements, and the Purchase Sale Agreement with RES Americas for the 200 MW Pleasant Valley wind generation facility.¹ In our July 26 filing we noted the Company was conducting discussions with RES Americas (developer of the Pleasant Valley Project) regarding a second build and transfer project with attractive pricing, but also with transmission risks we were in the process of analyzing. That proposal was the Border Winds Project.

The Company has been able to identify the scope of the transmission risks associated with the Project, and has entered into a Purchase and Sales Agreement (PSA) with RES Americas that is structured to protect the Company and our customers from excessive transmission cost. We are therefore bringing the Border Winds Project to the Commission for an Advance Determination of Prudence (ADP) and Certificate of Public Convenience and Necessity (CPCN).

Once again, the acquisition of a wind-powered generating resource represents a prudent opportunity for the Company to meet the needs of all the customers we serve within our five-state integrated NSP system in the most cost-effective manner possible. Energy from the Border Winds Project will often displace more expensive energy from traditionally-fired generation plants elsewhere. We estimate that with the addition of this 150 MW wind resource, our customers' bills will, over time, be approximately \$45 **\$43** million lower than they would be otherwise. And generally, Company-owned resources can continue to deliver the benefits of such low-cost energy to our customers over a longer time period.

The Border Winds Project also increases the diversity of our resource mix and thereby provides a hedge against volatile natural gas prices and potential environmental regulation. In addition, the Project fits with our strategy of having a ~~geographically~~ geographically diverse balance of Company-owned wind resources.

¹ *In the Matter of the Application of Northern States Power Company for an Advance Determination of Prudence for the 200 MW Purchase Agreement with the Courtenay Wind Project (Case No. PU-13-706); In the Matter of the Application of Northern States Power Company for an Advance Determination of Prudence for the 200 MW Purchase Agreement with the Odell Wind Project (Case No. PU-13-707); and 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).*

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For these reasons, we believe the Commission should grant an ADP for the Border Winds Project after notice and a hearing, if necessary, is held pursuant to N.D.C.C. § 49-05-16, and also authorize the transfer of the Project from RES Americas to the Company as may be required under N.D.C.C. § 49-04-06.² We also believe the Commission should grant a CPCN for the Project.

To capture the benefits we have identified, Border Winds must be underway before the end of 2013 to qualify for the federal Production Tax Credit (PTC). We therefore respectfully request the Commission to set a procedural schedule that will facilitate Commission action on this ADP request sometime in October 2013, if at all possible.

RES Americas has not yet completed the generator interconnection process prescribed by the Midwest Independent Transmission System Operator (MISO) tariffs. Preliminary work indicates that the Project may require transmission network upgrades costing up to \$50 million. However, that result is very sensitive to the modeling assumptions used. The extent of transmission network upgrades will be determined as MISO studies are completed this fall and next winter. Given the deadline for PTC eligibility, we cannot wait for better transmission information before presenting our petition and still capture the potential benefits of the Project for our customers. Instead, we have negotiated contract provisions that allow us to terminate the development of the Project at various stages in the MISO interconnection process if it becomes apparent that transmission costs are too high. As a result, Border Winds will be developed only if we are reasonably assured the Project can provide benefits to our customers.

The remainder of this Application will provide:

- I. Description of the Applicant
- II. Communications and Service
- III. Standard of Review
- IV. Project Description
- V. Impact of Project on Pending Natural Gas Peaking Proposal
- VI. Project Selection
- VII. Cost Effectiveness of Project
- VIII. Reasons Supporting Granting ADP
- IX. Reasons Supporting Granting CPCN
- Conclusion

² Given the North Dakota location of this facility, Section 49-05-16-06 of the North Dakota Century Code prescribes a “rebuttable presumption” of prudence to this project.

I. DESCRIPTION OF THE APPLICANT

Xcel Energy is a Minnesota corporation duly authorized to conduct business in the State of North Dakota as a foreign corporation. The Company conducts business in the State of North Dakota as a public utility subject to the jurisdiction and regulation of the Commission pursuant to Title 49 of the North Dakota Century Code. The name and address of Xcel Energy is:

Northern States Power Company
414 Nicollet Mall
Minneapolis, Minnesota 55401

Xcel Energy also operates in North Dakota from the following address:

Northern States Power Company
2302 Great Northern Drive
Fargo, North Dakota 58102

The Company's Certificate of Incorporation with amendments and Certificate of Authority were filed with the Commission on September 30, 2009 and October 12, 2009, respectively, in Case No. PU-09-664. Current Certificates of Good Standing issued by the North Dakota and Minnesota Secretaries of State were filed in the same case on March 11, 2013, and are incorporated herein by reference.

Xcel Energy has service territory in five upper Midwest states including North Dakota. We presently serve approximately 90,000 retail electric customers in and around Fargo, Grand Forks, and Minot, North Dakota. We own just over 250 miles of transmission lines and 14 substations in North Dakota.

II. COMMUNICATIONS AND SERVICE

We respectfully request that the following persons be placed on the Commission's official service list for all official communications in this case:

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III. STANDARD OF REVIEW

A. Standard for Advance Determination of Prudence

North Dakota Century Code Section 49-05-16 (1)(d) authorizes the Commission to issue an ADP if it “determines that the resource addition is prudent.” Section 49-05-16 (7) further provides that “[t]here is a rebuttable presumption that a resource addition located in the state is prudent.”

This standard is similar to the “honestly and prudently invested” standard that the Commission uses for ratemaking. *See* N.D.C.C. § 49-06-02. The general prudence standard calls for determining whether the utility action was reasonable at the time it was taken under all relevant circumstances. *See* Charles F. Philips, Jr., *The Regulation of Public Utilities – Theory and Practice* at 292 (Public Utility Reports 1988); *see also* David. J. Muchow, William A. Mogel, *Energy Law and Transactions* at § 4.02[3][b] (2009). Under N.D.C.C. § 49-05-16 (1), the Commission may issue an order approving the prudence of a proposed project if four conditions are met:

- a. The public utility files with its application a projection of costs to the date of the anticipated commercial operation of the resource addition;
- b. The public utility files with its application a fee in the amount of one hundred seventy-five thousand dollars;
- c. The commission provides notice and holds a hearing, if appropriate, in accordance with section 49-02-02; and
- d. The commission determines that the resource addition is prudent. For facilities located or to be located in this state the commission, in determining

whether the resource addition is prudent, shall consider the benefits of having the resource addition located in this state.

B. Standard for Certificate of Public Convenience and Necessity

North Dakota Century Code Section 49-03-01 provides that:

An electric public utility may not begin construction or operation of a public utility plant or system, or of an extension of a plant or system without first obtaining from the commission a certificate that public convenience and necessity require or will require such construction and operation.

Before the Commission may issue a CPCN, the electric public utility must file a certified copy of its articles of incorporation, and submit evidence that it has obtained, or will make application to obtain, the consent of any other public authority whose consent is required. N.D.C.C. § 49-03-02. After notice and hearing, the Commission may: (i) issue the certificate; (ii) refuse to issue the certificate; (iii) issue the certificate for only portions of the proposed facilities; or (iv) issue the certificate subject to such terms and conditions the Commission determines the public convenience and necessity requires.

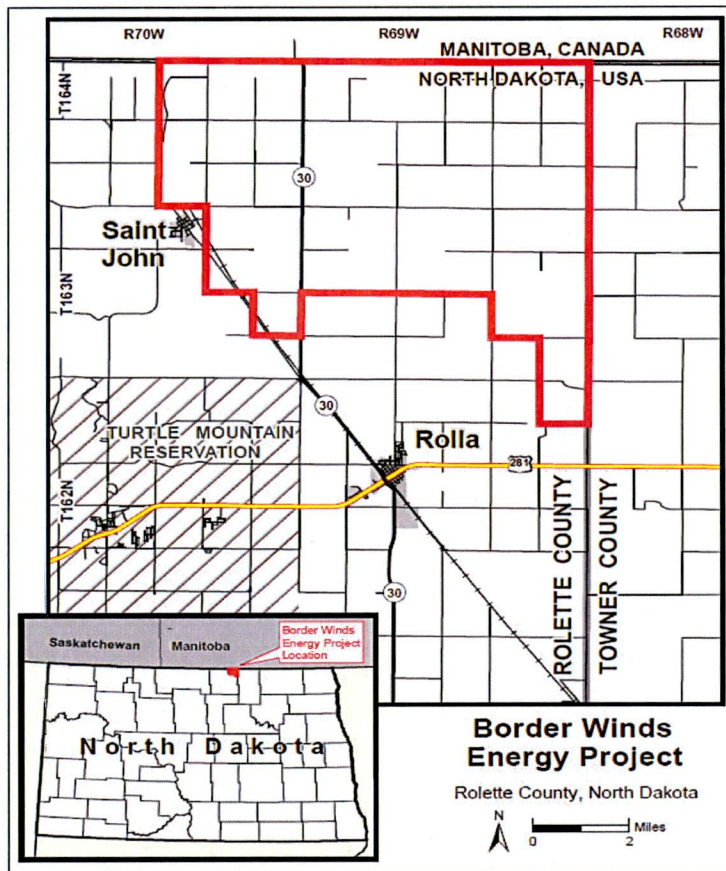
The Commission has indicated that it considers an additional ten factors in determining whether to grant a CPCN for new electric facilities, relating to whether the facilities extend into and impact other electric service providers' service territories, and whether the facilities are unnecessarily duplicative.³

The overall standard applied by the Commission pursuant to statute and its ten factors is whether the proposed system addition is needed under all the circumstances, and whether the applicant is qualified to implement the proposed system addition.

IV. PROJECT DESCRIPTION

The Border Winds project is a 150 MW wind energy generation facility that will be located on 52.5 square miles of land in northeastern Rolette County, North Dakota immediately south of the U.S.-Canadian Border.

³ Testimony of Jerry Lein of the Commission Staff, presented to the Interim Electric Industry Competition Committee, April 24, 2000. These factors are discussed in Section X of this Application.



RES Americas will develop the Border Winds project and upon completion, transfer ownership to Xcel Energy. Xcel Energy will then dissolve the project entity and own and operate Border Winds.

The Border Winds project will consist of [**TRADE SECRET BEGINS** ~~XXXXXXXXXX~~ **TRADE SECRET ENDS**] wind turbine generators. Associated infrastructure includes access roads, electrical collection system, meteorological monitoring stations, a project collector substation, a new interconnection substation and an operations and maintenance facility. An analysis of the site-specific wind data was conducted by our consultant, V-Bar, utilizing the specific turbines planned for the project. The analysis predicted a net capacity factor of 45.51 percent⁴ for the wind turbines, which was used for our final levelized-cost analysis.

⁴ V-Bar provided a probability analysis. There is a 50% probability that Border Winds' capacity factor will exceed 45.51.

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The Border Winds Project will interconnect at a new 230 kV substation on Xcel Energy's Rugby to Glenboro 230 kV line. A less than one-mile 230 kV line will connect the wind farm's collector substation to the point of interconnection. The Project has applied for and will participate in MISO's August 2013 Generator Interconnection Study cycle, which will identify all required transmission upgrades required for the project to interconnect to the transmission grid.

We will purchase the Border Winds project pursuant to a PSA with RES Americas that has the same general structure as the PSA for Pleasant Valley. Under the Border Winds PSA, the Company will be purchasing the Limited Liability Company (LLC) that holds all of the Project assets, such as the generating facilities, real estate, and contracts for the Project.

The transaction is structured as a purchase of a LLC to allow RES Americas some flexibility in development of the project, to create efficiencies in the mechanics of the project transfer by taking advantage of certain legal merger constructs, and to provide certain tax benefits during development. This structure requires RES Americas to assume construction risk throughout the development and construction phase of the Project, as they are responsible for the physical construction of the Project.

After the closing of the purchase, the Company will merge the LLC into Northern States Power Company – Minnesota and reflect the Project assets on its books as it would any other Company-owned generating facility. Except for the Pleasant Valley Project, the Company has not engaged in any transactions structured in this way in the past; however, our Colorado affiliate, Public Service Company, has recently, and successfully, consummated such a transaction.

We note that N.D.C.C. § 49-04-06 requires the Company to obtain the approval of the Commission before acquiring the business of a limited liability company that is incorporated for, organized for, or engaged in "the same or a similar business" as the Company. The Commission has set forth the public interest standard for approval of applications pursuant to Section 49-04-06.⁵ The Commission application of the public interest standard in the merger context looks to whether the transaction will be "injurious to the rights of the public or adversely affect other utilities."⁶ Because the proposed transaction will provide benefits to our customers and does not adversely affect other utilities, the public interest standard has been

⁵ *Re Minot Telephone Company*, FINDING OF FACT, CONCLUSIONS OF LAW AND ORDER at Finding 13, Case No. PU-156-94-11 (March 23, 1994).

⁶ *Id.*

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met. Consequently, to the extent the transaction described above comes within the scope of Section 49-04-06, the Company asks that the Commission grant its approval of the transaction along with its Advanced Determination of Prudence (ADP) of the Project.

The transaction is contingent on several regulatory approvals. These include: (1) receipt of an ADP from the North Dakota Public Service Commission; (2) approval of the Department of Justice for the merger under the Hart-Scott-Rodino Act; and (3) approval of the Federal Energy Regulatory Commission for the merger under Section 203 of the Federal Power Act. Should the Commission approve this Petition and grant an ADP, we will make the federal filings at the appropriate time, closer to close of the transaction.

The PSA contains usual and customary terms for a transaction of this type. We provide the PSA with RES Americas as Trade Secret Attachment A to this filing. Construction is expected to begin in the late 2013. The current project schedule contemplates commercial operation in late 2015.

We estimate the total capital cost of the Border Winds Project will be approximately [TRADE SECRET BEGINS ██████████ TRADE SECRET ENDS], including Xcel Energy's anticipated development oversight and ownership transfer closing costs. Our PSA with RES Americas calls for payments of approximately [TRADE SECRET BEGINS ██████████ TRADE SECRET ENDS] for development of the Project. We estimate Xcel Energy's development oversight and ownership transfer costs included in the Project's total capital costs will be approximately \$4.5 million. The total capital costs reflect [TRADE SECRET BEGINS ██████████ TRADE SECRET ENDS] to be absorbed by RES. If the [TRADE SECRET DATA BEGINS ██████████ TRADE SECRET DATA ENDS] exceed that amount, the Company may also be responsible for [TRADE SECRET BEGINS ██████████ TRADE SECRET ENDS] would trigger the Company's right to terminate the PSA. We calculate the 25-year levelized cost of electricity to be [TRADE SECRET BEGINS ██████████ TRADE SECRET ENDS] based on [TRADE SECRET BEGINS ██████████ TRADE SECRET ENDS] of capital costs and our estimates of O&M.

V. IMPACT OF PROJECT ON PENDING NATURAL GAS PEAKING PROPOSAL

As is the case with the Courtenay, Odell, and Pleasant Valley projects, it appears

the Border Winds Project will not have any accredited capacity in the 2017 to 2019 timeframe, and as a result, will not affect the capacity need that is being addressed by our ADP/CPCN Applications before the Commission for our proposed peaking units in Case Nos. PU-13-194 and PU-13-195.⁷ However, the energy provided by these proposed wind projects may impact the *type* of resource(s) selected to meet that need.

The addition of the Border Winds Project to our system provides significant economic benefits to our customers. We expect that the Project's impact on the evaluation of the resources proposed in those cases will be performed as part of those cases.

VI. PROJECT SELECTION

The Border Winds Project is the result of an RFP process we initiated following the January 2013 extension of the federal Production Tax Credit, believing there would be opportunities to secure wind resources at cost-effective rates because the PTC can account for one-third to one-half of a wind project's total cost. As discussed in detail in our July 26, 2013 filing in Case Nos. PU-13-706, PU-13-707, and PU-13-708, we issued the RFP on February 18, 2013 for proposals of any size up to 200 MW and of various structures including utility ownership, PPA, or any combination thereof with no preference given to any particular type of structure. The RFP generated proposals for 57 projects comprising approximately 6,300 MW of distinct resources. Many projects contained several PPA and ownership options with associated variations in size and price.

Our Resource Planning department led the evaluation team. Copies of proposals with a PPA component were provided to our Purchased Power group for further evaluation, and copies of proposals with an ownership component were delivered to our Business Development group. Proposals containing offers for both PPAs and ownership structures were provided to both groups.

We performed an initial screening of bids based on our calculation of levelized cost. This initial screening identified the most cost-effective projects thus allowing us to target efforts on those projects having the best potential to provide long-term value to our customers. Based on the distribution of levelized cost we focused review on bids that were at or below \$29/MWh. We chose the cutoff price of

⁷ These units are part of our proposal for a total of three peaking units to be added to our system in Minnesota's competitive resource acquisition proceeding, referred to as RAP (Docket No. E002/CN-12-1240).

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\$29/MWh as it provided for a reasonable number of the most cost-effective proposals from which to focus further review efforts. The initial screening process identified 14 projects below the established levelized price threshold (see Attachment B).

A significant consideration of any project is its ability to interconnect with the transmission system. Therefore, our Transmission Access group performed a detailed multi-factor review of the status of each project's MISO interconnection request and potential transmission requirements. This review identified potential significant issues around transmission interconnection cost and curtailment risk for several of the projects. Based on this analysis, the Transmission Access group recommended that a number of projects be eliminated from further consideration.

The Business Development group used the information provided by the Transmission Access group and other information provided in the bids to determine the potential viability of develop /transfer projects. From this assessment, Business Development identified five projects that appeared attractive from an ownership perspective. These five projects were separated into three tiers to differentiate their relative attractiveness.

The Pleasant Valley Project appeared at this point to have characteristics that stood out from the others. A second tier of projects also appeared to be attractive, which included the Border Winds Project. The third tier of projects were of interest, but had characteristics that were less attractive from an ownership perspective. As the result of the analysis, attention was focused on Pleasant Valley and Border Winds proposals by RES Americas, with discussion continuing with one additional developer. The Business Development group proceeded with due diligence and contract negotiations on these recommended projects.

Business Development's detailed due diligence on RES Americas' proposals involved evaluating a number of measures, including price, energy production profile, curtailment risk, interconnection and transmission requirements and costs, environmental risk, developer experience, and several other criteria. This evaluation determined that Border Winds offered significantly greater net benefits to our customers than the other proposals still under consideration, but that possible transmission issues had the potential to add significant costs. The Company concluded that the significant upside of the Project warranted giving RES Americas the opportunity to determine what the actual transmission requirements for Border Winds will be in MISO's interconnection study process. However, MISO's studies will not be far enough along to identify the Project's network upgrade costs in time to incorporate them and obtain Commission

approval before the end of the year when the Project's PTC eligibility expires. The Company therefore negotiated provisions with RES America allowing Xcel Energy to terminate the PSA for the Project should transmission costs exceed a limit beyond which, in the Company's sole discretion, the Project's costs are disproportionate to its benefits.

VII. COST EFFECTIVENESS OF PROJECT

To evaluate the cost effectiveness of the Border Winds Project, we used the Strategist resource planning model. The Strategist planning model simulates the operation of the NSP System and estimates the total cost of energy over the life of the Project on a present value basis. We use the model to test results under a range of input assumptions. To assess Border Winds' impact on customer costs, we simulated the operation of the NSP System over the next 40 years with and without the addition of the 150 MW of wind generation from the Project.

Wind generation has a zero marginal cost to produce the next unit of energy. In other words, after capital and on-going O&M costs are accounted for, it costs a wind generator nothing to produce the next MWh of energy. As the result, MISO generally provides for wind production ahead of other, higher marginally-priced, generation such as gas- and coal-based generation. Consequently, the more wind on the system and generating, the less traditionally-fired generation is operated. When the energy from the 150 MW Border Winds Project is produced, it displaces a similar need for the Company to either produce the energy elsewhere on its system or purchase energy from the MISO market. The Strategist analysis accounts for these cost savings as well as the impact of the capital commitments associated with the Project.

1. Modeling Border Winds

For Company-owned projects, the upfront purchase price must be translated into a projection of annual revenue requirement associated with financing, operations, depreciation, and taxes. Projections of upfront and on-going capital investments and annual operating and maintenance expenses must also be developed.

To create a total annual cost of ownership estimate, we used a spreadsheet model and transferred that annual total cost estimate directly into Strategist. Upfront capital investments are well defined. The on-going capital investments and annual O&M expenses projections are subject to some uncertainty due to unforeseen equipment failures or changing costs within the industry. To test how variation from the base forecasts would impact the overall cost-effectiveness of the project,

we conducted sensitivity tests in Strategist of plus and minus 25 percent of projected on-going capital investments and O&M expenses.

The economic benefit of an owned wind project is highly-dependent on the annual generation from the site. Each additional MWh produced by a Company-owned project increases the value of the project because the higher the production, the lower the average costs will be, and therefore, the larger the benefits. To test how average capacity factors impact the economic value of Border Winds, Strategist modeled this sensitivity using +/- 5 percent of the expected annual generation. The base assumption for the life of each ownership option was 25 years, and sensitivities were performed for 20 year and 30 year lives.

The profile for the Project is based upon Typical Wind Year (TWY) profiles for existing NSP wind farms that are geographically proximate. The profile was adjusted to match the target annual generation.

In accordance with the latest MISO effective load carrying capability (ELCC) analysis, we modeled Border Winds having a 13.3 percent accredited capacity value. However, per MISO's tariff and business practices, for the Project to receive accreditation as a capacity resource it must have firm delivery rights either with Network Resource Interconnection Service or firm transmission service (Network Integration Transmission Service or Firm Point-to-Point Transmission Service). Our expectation for Border Winds, as well as our proposed 600 MW wind portfolio, is that these wind resources will not be given this designation until 2021 when various transmission system upgrades, including MISO's MVP projects, are complete. Our modeling efforts reflect the expected capacity accreditation in 2021.

The Strategist model does not explicitly model transmission congestion and line losses for new resources. To ensure that we are accounting for the costs associated with our wind proposal, we included the congestion and line loss estimates from MISO's 2012 Promod model. The Promod model contains detailed information on the transmission topology in MISO, and has the ability to forecast hourly prices at individual nodes throughout the system. It is the same model that MISO used in their most recent round of transmission planning analysis, and contains all planned upgrades to the transmission system that may impact transmission congestion in the future. The difference in price between any two locations within MISO is interpreted at the combined impact of transmission system congestion and line losses.

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2. *Strategist Results*

The results of the Strategist analysis show that Border Winds will result in net savings for our customers.

(REVISED) Table 1: PVRR Results (\$millions)

		Base	Low Gas	\$0/ton CO2	Markets Off	30 Year Operating Life	20 Year Operating Life	+5% Capacity Factor	-5% Capacity Factor	+25% On-Going Ownership Costs	-25% On-Going Ownership Costs
As Filed	Base Case	\$40,412	\$37,235	\$40,412	\$40,720	\$40,382	\$40,172	\$40,305	\$40,428	\$40,443	\$40,497
Corrected	Base Case	\$40,164	\$36,991	\$40,164	\$40,448	\$40,135	\$40,199	\$40,148	\$40,190	\$40,181	\$40,147
As Filed	Border Winds	\$40,366	\$37,243	\$40,366	\$40,660	\$40,309	\$40,151	\$40,340	\$40,393	\$40,411	\$40,348
Corrected	Border Winds	\$40,121	\$37,001	\$40,121	\$40,391	\$40,071	\$40,181	\$40,080	\$40,165	\$40,151	\$40,091

(REVISED) Table 2: Incremental PVRR from Base Case (\$millions)

		Base	Low Gas	\$0/ton CO2	Markets Off	30 Year Operating Life	20 Year Operating Life	+5% Capacity Factor	-5% Capacity Factor	+25% On-Going Ownership Costs	-25% On-Going Ownership Costs
	Base Case	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
As Filed	Border Winds	(\$45)	\$8	(\$45)	(\$60)	(\$74)	(\$20)	(\$55)	(\$35)	(\$32)	(\$50)
Corrected	Border Winds	(\$43)	\$10	(\$43)	(\$57)	(\$64)	(\$18)	(\$68)	(\$25)	(\$30)	(\$56)

Shaded cells denote amounts as corrected

As indicated in the present value of revenue requirements (PVRR) tables above, the Border Winds Project provides significant cost savings to our customers even under the conservative sensitivity cases studied. The analysis also indicates that Border Winds can still provide customer benefit with transmission costs totaling up to approximately \$50 million.

An alternate way of presenting the Strategist results is by calculating the levelized price of the project and the other costs and benefits associated with it. Levelized prices are a fixed \$/MWh price that have the same net present value (NPV) as the actual cost streams generated by Strategist. In addition to the direct project costs, we included costs for wind integration, transmission congestion, and line losses. While the primary benefit of the project is displaced generation from fossil fuel resources, the Strategist model also tracks benefits from avoided CO₂ emissions and capacity credit. Table 3 below illustrates how the levelized cost of the project is more than offset by the value of avoided generation.

Table 3: Levelized Costs Analysis - \$/MWh

	[Trade Secret Begins
Revenue Requirements	
Wind Integration	
Congestion/Line	

	[Trade Secret Begins]
Losses	
Avoided Fossil Fuel	
Capacity Credit	
	Trade Secret Ends]
Net Cost (Benefit)	(\$7.30)

In addition to the compelling economic benefits, adding additional wind at favorable pricing provides a hedge against future increases in natural gas prices, market energy costs, and CO₂ regulation. This is primarily because the wind displaces thermal generation or market purchases that are subject to volatility in fuel, power and emissions costs. To illustrate the benefit of the Border Winds Project, Table 4 below shows the base case volumes of natural gas, market purchases and CO₂ emissions – and the deltas against these factors for the project.

Table 4: Hedge Value

Total System 2015-2050	CO2 <i>Million tons</i>	Natural Gas <i>bcf</i>	Market Purchases <i>GWb</i>
BASE	647	2,714	51,545
Border Winds	(8)	(69)	(2,324)

We expect that soon after initial operation, customers’ overall bills will be lower than otherwise as a result of our proposed resource acquisition. Our Strategist dispatch simulation forecast that the cost of the Border Winds project proposed in this Petition will be more than offset by decreases in the cost of fossil fuel and other purchased energy.

To develop our rate impact estimates, we used the output of our Strategist model divided by our forecasted sales volume. Table 5 below estimates how average rates will be affected by the proposed wind project.

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Table 5: Annual Rate Impact Analysis

	2015	2016	2017	2018	2019	2020
Base Rates - Border Winds	0.02¢/kWh	0.06¢/kWh	0.05¢/kWh	0.04¢/kWh	0.03¢/kWh	0.02¢/kWh
Wind Integration & Congestion	0.00¢/kWh	0.01¢/kWh	0.01¢/kWh	0.01¢/kWh	0.01¢/kWh	0.01¢/kWh
Avoided Fuel & Purchased Power	(0.01¢/kWh)	(0.03¢/kWh)	(0.04¢/kWh)	(0.05¢/kWh)	(0.05¢/kWh)	(0.05¢/kWh)
Net Rate Impact	0.01¢/kWh	0.03¢/kWh	0.01¢/kWh	0.00¢/kWh	(0.02¢/kWh)	(0.03¢/kWh)

	2021	2022	2023	2024	2025
Base Rates - Border Winds	0.01¢/kWh	0.01¢/kWh	0.01¢/kWh	0.00¢/kWh	0.02¢/kWh
Wind Integration & Congestion	0.01¢/kWh	0.01¢/kWh	0.01¢/kWh	0.01¢/kWh	0.01¢/kWh
Avoided Fuel & Purchased Power	(0.05¢/kWh)	(0.06¢/kWh)	(0.06¢/kWh)	(0.06¢/kWh)	(0.07¢/kWh)
Net Rate Impact	(0.03¢/kWh)	(0.04¢/kWh)	(0.04¢/kWh)	(0.05¢/kWh)	(0.04¢/kWh)

We estimate that the peak rate impact of the Border Winds project will be six one-hundredths of one cent, but then rapidly decline as the project is depreciated. However, the cost impact of this project will be offset by reductions in fuel and purchased energy. These offsets begin at one one-hundredths of one cent, and are forecasted to increase to more than seven one-hundredths of one cent by 2025 – delivering significant cost savings to our customers over the long-term.

VIII. REASONS SUPPORTING GRANTING ADP

A. Cost-Effective Resource

The Company’s acquisition of the Border Winds Project is prudent. We have evaluated the Project from a long-term perspective and from a near-term rate impact perspective. And we have evaluated the risks associated with the development of the Project. Based on all of this analysis, we believe that it is reasonable and in our customer’s interests for the Commission to grant an ADP for these projects. We also note that pursuant to N.D.C.C. § 49-05-16 (7), the Border Winds Project is presumed to be prudent.

Our analysis shows that the addition of the Border Winds Project will keep our customers bills lower than they otherwise would be. Using what we believe are conservative assumptions, our Strategist modeling predicts energy costs for our customers will be \$45 \$43 million lower over the life of the Project, and on the order of three times that if substantial carbon dioxide emission cost regulations are established.

Our analysis leads us to conclude that the addition of Border Winds Project to our system is prudent because it will contribute to substantial financial benefits to our

up to a cap, and then have the option to pay for additional [TRADE SECRET DATA BEGINS [REDACTED] TRADE SECRET DATA ENDS] to deliver benefits with reasonable confidence.

IX. REASONS SUPPORTING GRANTING CPCN

The Border Winds Project is a cost-effective resource that is being acquired to help lower costs to keep energy prices for our customers as low as possible, and to comply with the regulatory requirements of all of the jurisdictions served by our five-state integrated system. In light of these circumstances, the Project is needed.

We have also worked to identify the development and operational risks associated with the Project, and have reasonably mitigated them through prudent contracting practices. This demonstrates that the Company is qualified to implement this proposed addition to our system.

1. *Commission's Ten Factors Support Need*

Xcel Energy provides the following responses to the ten factors the Commission considers regarding a proposed facility's impacts on other service providers, and whether the facility is unnecessarily duplicative. These factors further support the need for the Border Winds Project and Xcel Energy's qualifications to add them to its system.

1. *From whom does the customer prefer electric service?*

Customer preference is not a consideration in this circumstance. The Border Winds Project will be an additional resource on the Xcel Energy system, which serves all the Company's customers within the system's five-state service area (North Dakota, South Dakota, Minnesota, Wisconsin, and Michigan).

2. *What electric suppliers are operating in the general area?*

Electric suppliers and nearby service territories are not at issue in this circumstance. The Border Winds Project will not provide direct retail service in competition with electric suppliers in the area.

3. *What electric supply lines exist within a two-mile radius of the locations to be served and when were they constructed?*

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An electric supply line in the vicinity is not a consideration in this circumstance. The Border Winds Project will not provide direct retail service in competition with electric suppliers in the area.

4. *What customers are served by electric suppliers within at least a two-mile radius of the location to be served?*

The customer base in the vicinity is not a consideration in this circumstance. The Border Winds Project will be an additional resource on the Xcel Energy system, which serves all the Company's customers within the system's five-state service area.

5. *What are the differences, if any, between the electric suppliers available to serve the area with respect to reliability of service?*

This is not a consideration in this circumstance. The Border Winds Project will not provide direct retail service in competition with electric suppliers in the area.

6. *Which of the available electric suppliers will be able to serve the location in question more economically and still earn an adequate return on its investment?*

This is not a consideration in this circumstance because the Border Winds Project will not provide direct retail service in competition with electric suppliers in the area.

7. *Which supplier's extended electric service would best serve orderly and economic development of electric service in the general area?*

This is not a consideration in this circumstance. The Border Winds Project will not provide direct retail service in competition with electric suppliers in the area.

8. *Would approval of the application result in wasteful duplication of investment or services?*

No. The Border Winds Project will improve the efficiency of our generation system and help keep customer costs lower than they would be otherwise.

9. *Is it probable that the location in question will be included within the corporate limits of a municipality within the foreseeable future?*

No. The area under consideration for the Border Winds Project is not likely to be included within a municipality within the foreseeable future.

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10. *Will the service by either of the electric suppliers in the area unreasonably interfere with the service or system of the other?*

This is not a consideration in this circumstance. The Border Winds Project will not provide direct retail electric service in competition with other electric suppliers.

In summary, the Border Winds Project satisfies the need requirements to be granted a CPCN.

CONCLUSION

We believe that our acquisition of the Border Winds Project will contribute to the substantial benefits to our customers – saving customers approximately \$45 ~~\$43~~ million in energy costs over time – and that we have reasonably mitigated the inherent risks associated with any new resource development.

Therefore, we respectfully request the Commission make an advance determination of the prudence of the Company's acquisition of Border Winds Project and approve the asset transfer of the Project to the Company as may be required. The Company also requests that the Commission grant a certificate of public convenience and necessity for the Border Winds farm to be located in northeastern Rolette County, North Dakota, immediately south of the U.S.-Canadian border.

Dated: August 13, 2013

Northern States Power Company

Respectfully submitted by:

/s/

Laura McCarten
REGIONAL VICE PRESIDENT
STATE AND REGULATORY AFFAIRS