



2302 Gr. N Drive  
Fargo, ND 58102

December 1, 2015

—VIA ELECTRONIC FILING AND U.S. MAIL—

Mr. Darrell Nitschke  
ND Public Service Commission  
600 E. Boulevard  
Dept. 408  
Bismarck, ND 58504-0480

RE:

BORDER WINDS ENERGY PROJECT  
COMPLIANCE FILING – DECOMMISSIONING PLAN  
CASE NO. PU-08-797

Dear Mr. Nitschke:

Northern States Power Company, a Minnesota corporation (“Xcel Energy” or “the Company”), submits to the North Dakota Public Service Commission (the “Commission”) this compliance filing in the above-referenced matter. This filing is being made pursuant to North Dakota Century Code 49-02-27, North Dakota Administrative Code Section 69-09-09-06, and Condition 31 of the Certificate of Site Compatibility for Energy Conversion Facility (Certificate Number 21, as amended) for Border Winds Energy, LLC (Border Winds) which requires a decommissioning plan describing the manner in which the Company anticipates decommissioning the Border Winds Project and the estimated costs to do so.

As part of this decommissioning plan, the Company respectfully requests the Commission approve a negative 4.6 percent net salvage rate to recover the costs of decommissioning the Border Winds facility. This net salvage rate will be used for purposes of future ratemaking, unless the rate is first approved as part of the Company’s Renewable Energy Rider docket, also pending before the Commission.

### **Background**

Border Winds is comprised of seventy-five 2.0 MW Vestas wind turbines located on privately owned land (primarily agricultural) located in northeastern Rolette County, North Dakota. Border Winds was developed by RES Americas and Xcel Energy is under contract to purchase the facility once it is constructed. Xcel Energy will own and operate the project

at the commencement of commercial operations. The Border Winds facility represents an important part of Xcel Energy's continued commitment to a cost-effective and geographically diverse supply portfolio of Company-owned wind resources.

Xcel Energy and RES Americas are in agreement that this decommissioning plan is consistent with the terms of this contract. The Border Winds facility is expected to go into commercial operation in early December 2015 with a service life assumption of 25 years and an estimated decommissioning date of October 2040. As is the case with all Company generating investments, the estimated remaining life of the facility will be periodically reassessed when the Company's Remaining Life Studies are conducted, which occurs every 5 years.

An Advanced Determination of Prudence ("ADP") for this project was granted by the Commission on February 26, 2014, in Case No. PU-13-742. A Certificate of Public Convenience and Necessity was issued by the NDPSC on August 20, 2014, in Case No. PU-13-743.

### **Decommissioning Scope**

Xcel Energy will begin decommissioning the Border Winds facility within eight months after the time the facility reaches the end of its useful life, as required in section 69-09-09-04 of the ND Administrative Code. The decommissioning process will be completed within eighteen months of the end of the facility's useful life.

Decommissioning will include:

- A. dismantling and removal of all towers, turbine generators, transformers and overhead cables;
- B. removal of underground cables to a depth of at least twenty-four inches;
- C. removal of foundations, buildings and ancillary equipment to a depth of at least three feet; and
- D. removal of surface road material and restoration of the roads and turbine sites to substantially the same physical condition that existed immediately before construction of the Border Winds facility.

In addition, the site will be restored and reclaimed to the same general topography that existed just prior to the beginning of construction, with topsoil re-spread over the disturbed areas at a depth similar to that in existence prior to the disturbance. Areas disturbed by the construction of the facility and/or decommissioning activities will be graded, top-soiled and reseeded unless the landowner requests in writing that the access roads or other land areas be retained.

In general, the Company's decommissioning and restoration activities will adhere to the requirements of the appropriate governing authorities and will be in accordance with

applicable federal, state and local permits, if any are required, and pursuant to the terms and conditions of any landowner leases currently in place.

### **Decommissioning Process**

The process of removing structures involves evaluating and categorizing all components and materials into categories of recondition and reuse, salvage, and disposal. In the interest of increased efficiency and minimal transportation impacts, components and materials may be stored on-site at landowner-approved locations until the bulk of similar components or materials are ready for transport. The components and material will be transported to the appropriate facilities for reconditioning, salvage or disposal. Above-ground structures include the turbines, transformers, overhead collection or transmission lines, substation(s) and the facility's portions of the interconnection facilities. Below-ground structures include turbine, substation and building foundations, collection system conduit and cable, fiber optic facilities and subterranean drainage structures, if any.

***Turbine removal:*** Access roads to turbines will be widened to a sufficient width to accommodate movement of appropriately sized cranes, trucks and other machinery required for the disassembly and removal of the turbines. Control cabinets, electronic component and internal cables will be removed. The rotor, nacelle and tower sections will be lowered to the ground where they may be transported whole for reconditioning and reuse, or disassembled/cut into more easily transportable sections for salvageable, recyclable or disposable components.

***Turbine and substation foundation removal:*** Topsoil will be removed from an area surrounding the foundation and stored for later replacement, as applicable. Turbine foundations will be excavated to four feet below grade per the landowner agreements in place. All anchor bolts, rebar, conduits, cable and concrete will be removed to that depth. The remaining excavation will be filled with clean sub-grade material of quality comparable to the immediate surrounding area. The sub-grade material will be compacted to a density similar to surrounding sub-grade material. All unexcavated areas compacted by equipment used in decommissioning will be de-compacted to adequately restore the topsoil and subgrade material to the proper density consistent and compatible with the surrounding area.

***Underground collection cables:*** The cables and conduits contain no materials known to be harmful to the environment. As part of the decommissioning, these items will be cut back to the required depth. All cable and conduit and other materials buried below the required depth will be left in place and abandoned.

***Overhead collection lines:*** Overhead collection lines and poles will be removed as needed.

***Access roads and construction pads:*** Access roads and construction pads will be reclaimed to agricultural land suitable for its purpose before the construction of the Border Winds facility.

### **Site Restoration Activities**

Prior to the removal of structures from all work areas, topsoil will be removed, separated from other excavated material, stockpiled and clearly designated. The topsoil will be replaced to original depth. The topsoil will be de-compacted to match the density and consistency of the immediate surrounding area. Any topsoil deficiency and trench settling will be mitigated with imported topsoil consistent with the quality of the affected site.

Following decommissioning activities, the sub-grade material and topsoil from affected areas will be de-compacted and restored to a density and depth consistent with the surrounding areas to a maximum depth of 18 inches. The affected areas will be inspected, cleaned and all construction-related debris removed. Disturbed areas will be reseeded to promote re-vegetation of the area to a condition reasonably similar to original condition. In all areas restoration shall include, as reasonably required, leveling, terracing, mulching and other necessary steps to prevent soil erosion, to ensure establishment of suitable grasses and forbs, and to control noxious weeds and pests.

### **Decommissioning Costs**

Xcel Energy will be responsible for all costs associated with decommissioning the Border Winds facility.

To ensure that there is adequate recovery of future decommissioning and restoration costs, a negative net salvage rate is included in the calculation of the depreciation expense rate for the project. The net salvage rate reflects both the estimated decommissioning costs and the offsetting proceeds from the salvaging and/or recycling of certain generation equipment, such as the towers, cables and other material. The net salvage rate is negative in this case because the forecasted costs of decommissioning the facility are higher than the expected salvage proceeds.

Since there were no site-specific studies available for the Border Winds facility upon which to base more precise decommissioning and salvage estimates on, the net salvage rates of other wind facilities owned by Xcel Energy were used as a proxy in the Company's recently completed *2015 Annual Review of Remaining Lives Study*<sup>1</sup>. In that study, the Company proposed a net salvage rate of negative 8.5 percent for this project. However, the 8.5 percent was based on complete removal of equipment and foundations below grade - well beyond the depth as specified in the landowner agreement as well as the statutory requirements in North Dakota. We assume that complete removal causes the demolition and restoration estimate to increase substantially compared to removal four feet below grade. Therefore, at this time, the Company recommends a net salvage rate of negative 4.6 percent for purposes of North Dakota rate making. This means, at least initially, an additional 4.6 percent of the value of all Border Winds assets will be collected over the life of the facility as

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<sup>1</sup> See *In the Matter of the Petition of Northern States Power Company for Approval of the 2015 Review of Remaining Lives*, MN Docket No. E,G002/D-15-46.

part of the annual depreciation expense and recorded in the accumulated depreciation reserve account for the eventual removal and restoration of the wind facility (less any actual salvage proceeds).

Net salvage rates are reviewed every five years with an engineering study for each generating facility. As rules and regulations change regarding removal (e.g. mandates for deeper removal of underground equipment and material), these changes can be incorporated into the five-year update.

Based on this approach, and supported by the detail on Attachment A, a conservative initial estimate of decommissioning expense for this project is approximately \$12.1 million, or about \$161,000 per turbine, in 2015 dollars. It should be noted that this estimate applies only to the generation assets for this project. The transmission assets within this project will be depreciated using the approved average service lives, net salvage rates and depreciation rates for those assets. These transmission depreciation lives and rates were approved in the Company's most recent electric rate proceeding (Case No. PU-12-813).

In the future, the Company will review the estimated decommissioning expense for the Border Winds project based on a more site-specific engineering study. This data will inform the next *Annual Review of Remaining Lives Study* to be filed in 2020 and may result in a revised net salvage rate going forward.

### **Conclusion**

Xcel Energy is a regulated utility governed by the laws of the State of North Dakota and will observe all regulatory requirements with respect to decommissioning the Border Winds facility including removal of all buildings and equipment and restoration of the land.

The Company's current assessment of the costs of decommissioning the Border Winds facility results in a net salvage rate of negative 4.6 percent. Xcel Energy respectfully requests the Commission approve this net salvage rate to recover decommissioning costs for Border Winds. This net salvage rate would be used in a future ratemaking proceeding unless the rate is first approved as part of the Company's pending RER docket.

If you have any questions or concerns regarding this matter, please contact me at [dave.sederquist@xcelenergy.com](mailto:dave.sederquist@xcelenergy.com) or (701) 241-8632.

Sincerely,



David H. Sederquist  
Sr. Consultant, Regulation & Finance

**Border Winds Decommissioning Plan  
Cost Estimate Breakdown (Nov. 23, 2015)**

**Turbine sites (75 sites)**

|                                       |                  |
|---------------------------------------|------------------|
| Dismantle turbine on ground           | \$2,400,000      |
| Trucking                              | \$1,350,000      |
| Foundation removal                    | \$675,000        |
| Crane rent                            | \$600,000        |
| Top soil (import and grade)           | \$450,000        |
| Labor                                 | \$440,000        |
| Crane mobilization and demobilization | <u>\$250,000</u> |
| Total                                 | \$6,165,000      |

**Access roads**

|  |                  |
|--|------------------|
| Remove aggregate (152,076 linear feet) | \$1,216,608      |
| Decompact under roadway                | \$608,304        |
| Grade topsoil                          | \$608,304        |
| Trucking                               | <u>\$560,000</u> |
| Total                                  | \$2,993,216      |

**Collection System**

|  |                  |
|--|------------------|
| Remove MV cable (≥ 3 ft below grade)       | \$417,500        |
| Remove junction boxes and gen transformers | \$284,000        |
| Fill voids in bores                        | <u>\$190,000</u> |
| Total                                      | \$891,500        |

**Substation and Switchyard**

|   |                 |
|---|-----------------|
| Trucking  | \$824,000       |
| Remove below grade items (foundations, ground grid) | \$483,000       |
| Remove yardstone and grade                          | \$332,000       |
| Remove equipment and steel structures               | \$247,500       |
| Remove & haul main transformers and elec enclosure  | \$196,000       |
| Fence and tree removal                              | <u>\$42,000</u> |
| Total   | \$2,124,500     |

|   |                     |                    |
|---|---------------------|--------------------|
|   |                     | <u>Per Turbine</u> |
| Grand total:                                | \$12,174,216        |                    |
| Exclude Transmission-related <sup>1</sup> : | <u>-\$2,124,500</u> |                    |
| Adjusted total:                             | \$10,049,716        | \$133,996          |
| Add 20% cost contingency:                   | <u>\$2,009,943</u>  |                    |
| <b>Final estimate:</b>                      | <b>\$12,059,659</b> | <b>\$160,795</b>   |
| Estimated Total Project Investment:         | \$264,886,066       |                    |
| Net Salvage Rate:                           | 4.6%                |                    |

1 Substation and Switchyard items are excluded because they are depreciated in separate transmission-related accounts.