

Casey A. Furey  
100 West Broadway, Suite 250  
P.O. Box 2798  
Bismarck, ND 58502-2798  
701.223.6585  
cfurey@crowleyfleck.com

December 22, 2017

**Via Hand Delivery**

Mr. Darrell Nitschke  
Executive Director  
North Dakota Public Service Commission  
600 E. Boulevard, Dept. 408  
Bismarck, ND 58505-0480

**RE: Wind Decommissioning Plan  
Case No. PU-16-642  
Our File No. 035218-000023**

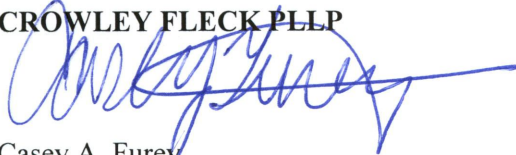
Dear Mr. Nitschke:

Enclosed for filing in the above-referenced case is a revised decommissioning plan with attached associated cost estimate.

Please call should you have any questions.

Sincerely,

**CROWLEY FLECK PLLP**



Casey A. Furey

CAF:bw  
Enc.

**BRADY WIND II, LLC**

**STATE OF NORTH DAKOTA  
PUBLIC SERVICE COMMISSION**

**Brady Wind II, LLC  
Brady Wind II Energy Center – Hettinger**

**Case No. PU-16-642**

**DECOMMISSIONING PLAN**

Pursuant to N.D. Admin. Code ch. 69-09-09, Brady Wind II, LLC provides this decommissioning plan for the 149.0 MW Brady Wind II Energy Center in Hettinger County, North Dakota (“Brady Wind II”).

Brady Wind II is comprised of 72 GE 2.1 MW wind turbine generators, which became operational in December 2016. This decommissioning plan is filed pursuant to the Commission’s rulemaking in PU-17-023, and is filed to update the existing decommissioning plan (Docket No. 1) in the above-referenced matter. The decommissioning plan is premised on the proper treatment of the asset retirement obligation, pursuant to generally accepted accounting principles or “GAAP,” associated with Brady Wind II.

**N.D. Admin. Code § 69-09-09-01(6)(a) - Anticipated Facility Life.**

Brady Wind II turbines have an anticipated useful life of at least thirty-five (35) years. Upgrades based on new technology may allow the wind facility to produce efficiently and successfully well beyond this period of time. Within twelve (12) months after the facility or turbine reaches the end of its useful life,<sup>1</sup> decommissioning shall begin and will be completed within twenty-four (24) months after the facility or turbine reaches the end of its useful life.

**N.D. Admin. Code § 69-09-09-01(6)(b) - Decommissioning Cost Estimate.**

In accordance with GAAP, Brady Wind II, LLC will assess, maintain, and recognize its asset retirement obligation, which includes decommissioning and restoration. The asset retirement obligation does not assume the recoupment of the salvage value associated with Brady Wind II’s components. The total cost of decommissioning and restoration at the end of the asset’s life is estimated to be approximately \$9,360,000.00. The per turbine cost for decommissioning and restoration is approximately \$130,000.00. Pursuant to N.D. Admin. Code. § 69-09-09-06, the decommissioning cost estimate has been prepared by a licensed North Dakota professional engineer. Further details are provided in Exhibit A attached hereto and incorporated by reference.

---

<sup>1</sup> Under N.D. Admin. Code § 69-09-09-03, there is a presumption that a facility is at the end of its useful life “if its annual capacity factor is less than ten percent for two consecutive years.” This presumption may be rebutted by providing to the Commission for approval a plan for returning the facility or turbine to service.

**N.D. Admin. Code § 69-09-09-01(6)(c) - Decommissioning Cost Estimate Method.**

See attached Exhibit A.

**N.D. Admin. Code § 69-09-09-01(6)(d) - Decommissioning Activities.**

Decommissioning of turbines and towers includes dismantling of turbine components and transporting offsite. The costs and activities for the removal of the tower and wind turbine components, the meteorological tower, access roads, and the collection system have been evaluated, as follows:

Tower and Wind Turbine Components. The turbines are GE 2.1 MW (72 turbines) on steel towers. Activities have been estimated for dismantling the turbines, the tower sections and wind turbine blades. Removal of the tower wiring and transformer is also included. All components would be removed from the property.

Tower and Transformer Foundations. Tower and transformer foundations, conduits and connections will be removed to a depth of three (3) feet below existing grade. The foundation sites will be graded to match surrounding contours and be restored to conditions that will support surrounding vegetation.

Tower Access Roads. Aggregate base roads will be scarified, loaded, and removed from site to an appropriate location. Remaining subgrade will be decompacted and graded into the adjacent soils to the approximate original topography. This area will be covered with topsoil from the site and vegetation re-established.

Collection System. The collection system terminations near the transformer will be removed to a depth of three (3) feet below existing ground line. The underground collection system cabling is presumed to be left in place at its current depth of at least 48 inches below grade to the top of the lines.

Disturbed areas would be restored and reclaimed to the approximate original topography. Topsoil will be spread over the disturbed area at a depth similar to that in existence prior to the disturbance. The disturbed areas would be graded, top-soiled, and reseeded according to National Resource Conservation Service guidelines, unless the Commission approves otherwise.

**N.D. Admin. Code § 69-09-09-01(6)(e) - Effects on Present and Future Natural Resource Development.**

Business operations at Brady Wind II will focus on harnessing wind resources during the project's useful life until which time the site will be restored pursuant to the Commission's rules through the decommissioning process. Brady Wind II is not anticipated to materially impact present or future natural resource development during operations or decommissioning.

**N.D. Admin. Code § 69-09-09-01(6)(f) – Detailed Plan of Financial Assurance.**

Brady Wind II, LLC is a wholly-owned, indirect subsidiary of NextEra Energy, Inc. (“NextEra Energy”), a leading clean energy company with consolidated revenues of approximately \$16.2 billion, and more than 45,900 megawatts of generating capacity as of year-end 2016. NextEra Energy’s principal subsidiaries are Florida Power & Light Company and NextEra Energy Resources, LLC (“NextEra Energy Resources”). Together with its affiliated entities, NextEra Energy is the largest generator of wind and solar energy in North America. Within the State of North Dakota, NextEra Energy Resources currently owns and operates 14 existing wind generation resources and is continuing to invest in and develop clean generating facilities in the State. Another key subsidiary of NextEra Energy is NextEra Energy Capital Holdings, Inc., which provides funding for NextEra Energy Resources subsidiaries.

Pursuant to N.D. Admin. Code § 69-09-09-07, financial assurance will be provided after the facility’s tenth year of operation. Brady Wind II, LLC will submit updated information at the time when financial assurance is provided.



November 28, 2017

North Dakota Public Service Commission  
600 E. Boulevard, Dept. 408  
Bismarck, ND 58505-0480

Regarding: *Decommissioning Estimate – Brady Wind II*

North Dakota Public Service Commission,

Per the request of Brady Wind II, LLC, the team of DEMCO Inc. and AE2S is pleased to submit the following *Decommissioning Cost Estimate* for the existing *Brady Wind II Facility* located in Hettinger County, North Dakota. The estimate is based on information gathered from DEMCO's historical data from the past 28 years of experience in the demolition and decommissioning industry, and AE2S's experience in engineering and environmental services throughout North Dakota over the last 25 years. Our team believes that the estimate is a conservative budgetary cost to complete this work.

**Background: DEMCO Inc.**

DEMCO, Inc. is a twenty eight year old, privately held, nationally recognized decontamination & decommissioning firm that specializes in environmental remediation, deconstruction and salvage for the US Government and commercial sector. DEMCO's management team is comprised of individuals with a total of over 200 years' worth of experience in environmental remediation and deconstruction services. To date, the total dollar volume of projects that DEMCO has safely and successfully performed is in excess of \$850 million. DEMCO has successfully performed over 600 remediation and deconstruction projects, including numerous fossil power plants, nuclear power plants, wind farms, and other industrial facilities.

**Background: AE2S**

AE2S offers a total solution by providing master planning, capital improvement planning, study and report, design, bidding administration, surveying, mapping, general civil engineering, structural engineering, electrical engineering, and site development. With over 25 years of experience in the North Dakota area, AE2S is familiar with the environment, work force, and rules/regulations involved with working in the state. With eighteen locations located within the Midwest, AE2S has a vast pool of resources and equipment that are relative to the area.

**The Team:**

DEMCO and AE2S partnered to help prepare a decommissioning cost estimate for the Brady Wind II Facility. DEMCO has experience in decommissioning wind farms throughout the country, while AE2S has experience regarding North Dakota's specific conditions, regulatory requirements, work force, hazards, etc. With DEMCO's national decommissioning experience, and AE2S's experience in engineering and environmental services specifically in the state of North Dakota, our team is confident that our estimates are reasonable and all encompassing.

**EXHIBIT A**



**The Process:**

DEMCO and AE2S worked hand in hand to prepare the attached estimate. During an initial planning phase, personnel from both parties conversed, shared notes, and had discussions about past experience, historical data, and other similar projects. Responsibilities were then assigned, and each company set out to obtain additional data and resources to assist in preparing the final document. Next, a draft version of the estimate was distributed and each team member reviewed and made notes. The final decommissioning estimate was created through a collaborative process which included discussion and agreement from all parties.

**Methodology:**

The cost estimate was developed on a per turbine basis. DEMCO has historical data for the man power, equipment, schedule, and respective costs for each phase of wind turbine decommissioning. Each phase of decommissioning was discussed during the estimate development process. AE2S provided input on how the timing, equipment, and man power could be specifically impacted by performing this work in the state of North Dakota.

DEMCO's data originated from the decommissioning of turbines at wind farm sites with similar scopes of work. During the development of the cost estimate, DEMCO and AE2S compared labor, equipment, and material costs and made adjustments to reflect the regional rates in the North Dakota area. Additionally DEMCO/AE2S are familiar with existing site conditions and how the varying terrain would affect the cost.

Please see the attached *Exhibit A*, providing a detailed cost breakdown of the work required which is presented in current 2017 dollars. This breakdown shows the costs for each phase of work required to safely decommission the turbines. The decommissioning cost estimate is reasonable and it is our conclusion that the costs include the scope of work and project management needed to properly decommission the Brady Wind II Facility.

Sincerely,

DEMCO, Inc.:

Patrick J. Callahan  
President

AE2S, Inc.:

Jay R. Kleven  
Senior Project Manager



**EXHIBIT A**



**Brady Wind II, LLC  
Decommissioning Cost Estimate - Brady Wind II  
Hettinger County, ND**

**BRADY WIND II - HETTINGER COUNTY, ND**

**FACILITY INFORMATION:**

|                     |                      |
|---------------------|----------------------|
| Facility Location:  | Hettinger County, ND |
| Facility Size:      | 149.0 MW             |
| Technology          | GE 2.1               |
| Number of Turbines: | 72                   |

**TURBINE COST BREAKDOWN**

For (1 ) GE 2.1 Wind Turbine & Associated Equipment

| Removal Activity                     | Percentage of Cost (%) | Cost                |
|--------------------------------------|------------------------|---------------------|
| Removal of Oil/Grease                | 4%                     | \$5,200.00          |
| Nacelle & Hub Removals               | 35%                    | \$45,500.00         |
| Tower Removal                        | 15%                    | \$19,500.00         |
| Down Tower Equipment Removal         | 3%                     | \$3,900.00          |
| Removal of Underground Cables (24")  | 6%                     | \$7,800.00          |
| Foundation Removals (3' Below Grade) | 25%                    | \$32,500.00         |
| Removal of Contaminated Soil         | 1%                     | \$1,300.00          |
| Backfill, Topsoil, Seed              | 10%                    | \$13,000.00         |
| Removal of Communication Tower       | 1%                     | \$1,300.00          |
| <b>Cost Per 1 Turbine</b>            |                        | <b>\$130,000.00</b> |

**TOTAL DECOMMISSIONING COST - COMPLETE FACILITY**

| Cost Per Turbine    | Number of Turbines | Total Cost            |
|---------------------|--------------------|-----------------------|
| <b>\$130,000.00</b> | <b>72</b>          | <b>\$9,360,000.00</b> |