

March 26, 2018

Meadowlark Wind I LLC
New Frontier Wind Energy Project – McHenry County

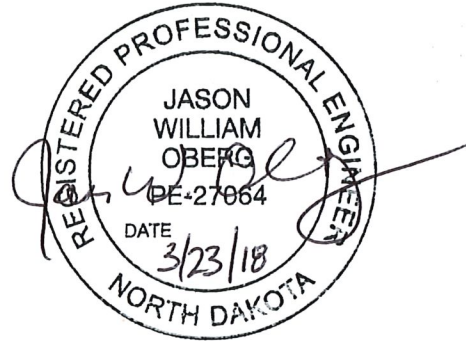
RE: Decommissioning Plan for Siting Application

To Whom It May Concern:

Attached hereto, please see the proposed decommissioning and site restoration plan for the New Frontier Wind Energy Project, in McHenry County, ND. This plan is a result of industry best practices that we believe offer the least environmental impact while restoring the land to pre-development condition. The plan was derived by collaboration of multiple trades: civil, high voltage, installation, structural and quality. We believe the plan to be both comprehensive and practical.

Please contact me with any questions.

Respectfully,
Jason W. Oberg, PE
Civil/Structural Engineer

**Attachments**

- Decommissioning & Site Restoration Plan
- Attachment A – Cost Estimate of Decommissioning

Wind Farm Decommissioning & Site Restoration Plan

New Frontier Wind Energy Project

McHenry County ND

Overview

Decommissioning will be triggered at the end of the Wind Plant's serviceable life or upon discontinuation of its use, as described below. The Wind Plant shall be considered to be at the end of its useful life if its annual capacity factor is less than ten percent for two consecutive years, unless a plan is developed outlining the steps and schedule for returning the Wind Plant to service. Decommissioning of the Wind Plant shall begin within twelve months after the end of its useful life and must be completed within twenty-four months of the end of its useful life.

The purpose of the Decommissioning Plan is to ensure that the Wind Plant facility and its related structures are properly removed at the end of their useful life and that the surrounding soil and vegetation is restored to a usable and nonhazardous condition. Moreover, the Decommissioning Plan also ensures that sufficient financial resources are available to undertake proper decommissioning. The Decommissioning Plan contains two components: (1) the manner of equipment removal and site restoration; and (2) the estimated costs of decommissioning and salvage.

Facility Dismantling, Removal, and Site Restoration

Based on experience in the Wind Plant industry, the decommissioning process for the project will be as follows:

1. Mobilize cranes to the site for each wind turbine.
2. Dismantle and remove the rotor, nacelle and towers and transport entire wind turbine generator off-site.

An excavator will be brought in to expose the pedestal or applicable portions of each foundation. Then with an air, or hydraulic hammer or comparable equipment, and/or with controlled blasting of the concrete foundations would be removed to a depth of at least 48" in compliance with the landowner's agreement, and all applicable state and federal environmental regulations. Moreover, to the extent that it is determined that it is more cost-effective to remove the turbine foundations using blasting techniques, a Blasting Plan would be developed and prior approval would be obtained from McHenry County. All blasting operations would be conducted in accordance with State Fire Marshall and OSHA rules and regulations.

Any agreement for removal to a lesser depth or for no removal shall be recorded with the county and shall show the locations of all such foundations. All such agreements between the permittee and the affected landowner shall be submitted to the Commission prior to the completion of restoration activities. At this time there are no agreements with any landowner that would specify restoration to a lesser depth than the 48" specified in North Dakota Administrative Code 69-09-09-05

For the purposes of the decommissioning cost estimates, it is assumed that the facility equipment will be removed to a depth of 4 feet below ground surface.

3. Within the foundation excavation limits, the metal and cable would be removed to a depth in compliance with North Dakota Administrative Code 69-09-09-05. For the purposes of the decommissioning cost estimates it is assumed that the facility equipment will be removed to a depth

of 4 feet below ground surface in compliance with North Dakota Administrative Code 69-09-09-05. Where possible, the metal and cable items would be separated and recycled.

4. Backfill the holes with the soil that was excavated and regrade the foundation areas to as close as reasonably possible to the original ground contours. These areas would be returned as close as reasonably possible to preconstruction conditions. Topsoil would be reclaimed from the surrounding 50' radius and added as required to support revegetation to original condition.
5. Other than those roads that the landowners wish to retain, access roads owned by the wind plant operator that lead to the wind turbines would be removed and restored to preconstruction conditions. Topsoil would be reclaimed adjacent from roadways where the black dirt will be placed during construction. During construction approximately 18' by 4" to 6" deep of black dirt will be stripped from the access roadway and spread in an area 15' wide on either side of the roadway. Upon decommissioning the native topsoil will be placed back into the roadway after removal of the access road gravel and decompaction of the cement stabilized subgrade. The gravel will be hauled off-site to a local quarry. Disturbed areas would be shaped and restored as close as reasonably possible to the original ground contours. For the purposes of the decommissioning cost estimate, it is assumed that all the site access roads will be removed.
6. Remove transformers and all other substation equipment from the site associated with the Wind Farm. Remove all concrete foundations, gravel and fencing, and regrade area as close as reasonably possible to the original substation conditions. Again, this area shall be returned as close as reasonably possible to pre-construction conditions.
7. Underground cable circuits are anticipated to be buried at a depth of 4 feet below grade. All cable will be cut off and abandoned as is. For the purposes of the decommissioning cost estimates, it is assumed that the facility equipment will be removed to a depth of 4 feet below ground surface.
8. Materials and components that can be salvaged will be recycled or resold.
9. All decommissioning and restoration activities will be performed in accordance with federal and state agency permit requirements and county, city or municipal permit conditions. The permittee will submit a copy of such permits and authorizations to the Commission upon request.
10. The permittee will comply with all laws applicable to the generation, storage, transportation, clean-up, and disposal of hazardous wastes generated during any phase of the project's life.

In addition to the foregoing, all decommissioned gearboxes, transformers, and hydraulic systems would be drained of fluids and put into appropriate containers before dismantling (once on the ground), and would be transported and disposed of in accordance with all state and federal environmental regulations.

Estimated Costs for Decommissioning and Site Restoration

Please see Attachment A for the current estimate of costs for decommissioning and restoration of the Wind Plant facility and returning the site, as close as reasonably possible, to preconstruction condition suitable for agricultural use. The estimate is based on the decommissioning approach outlined above and is conservatively based on the removal of twenty-nine (29), V126-3.45 MW wind turbine generators, the collector substation, transmission line, the 60,681' of site access roads, and one meteorological tower.

The cost estimate presented in Attachment A takes into account two major financial considerations; the cost to conduct the Wind Plant decommissioning and restoration activities (i.e., outgoing expenditures), and, when applicable, the salvage value of components being decommissioned (i.e., incoming revenue). To be conservative, the salvage value used in this cost estimate is 70 percent of the currently estimated market value for those salvaged components.

Recognizing the 45 year term of this plan, the cost estimate must be updated and filed with the commission ten years after initial approval of the decommissioning plan and then continue to be updated and filed with the commission every five years until decommissioning is complete to reconfirm the validity of the salvage values and the cost estimate for the decommissioning and restoration project. As an ongoing developer, the Owner will be able to perform most or all of the valuation internally, but this process could include (if required):

1. Contact Owner, the original turbine vendor, and other equipment vendors of salvaged equipment, to reconfirm the (then) current cost of equivalent new turbines, transformers and other equipment.
2. Contact independent vendors of used equipment to reconfirm the value of used equipment on the market.
3. Contact demolition companies to determine their cost valuation of the decommissioning process, net of the equipment salvage values.
4. Recalculate the cost estimate attached to this plan to reflect the revised costs associated with decommissioning and restoration of the project site.
5. Provide revised cost estimate and confirmation of continued financial assurance to the Agency, in accordance with North Dakota Administrative Code 69-09-09.

Attachment A
Estimate of Decommissioning

Project:	New Frontier	4.18.18
Owner:	Capital Power	
Location:	McHenry County, ND	

Wind Tower Decommission and Site Restoration Estimate - WTG Salvage Estimate

1.0 Turbines and Towers

Decommission of turbines and towers for this estimate includes dismantling of turbine components and transporting off site. Price includes deduct for salvage value of the components.

Turbines: Vestas V126

Towers: 87 m Steel Tower

	Quantity	Unit Cost	Extended Cost	Assumptions
1.1 Dismantle Turbine & Towers	29 ea	\$ 45,000.00	\$ 1,305,000	Removal of electrical tower wiring included and hauling of tower/turbines off-site
1.2 Salvage Value of Components	6,235 tn	(\$150.00)	\$ (935,250)	Includes turbine and tower steel components. *Estimated Value
1.3 Removal of Transformers	0 ea	\$ -	\$ -	N/A
1.0 Turbine and Tower Totals:			\$ 369,750	

2.0 Tower Foundations

Tower foundations will be removed to a depth of four (4) feet below existing grade. Transformer foundations will be removed to four (4) feet below grade or in their entirety. Conduits and connection will be removed to a depth of four (4) ft below grade. Foundation sites will be graded to match surrounding contours and restored to conditions that will support surrounding vegetation.

Type: 18 ft diameter Spread Foundation Pedestal

	Quantity	Unit Cost	Extended Cost	Assumptions
2.1 Foundation Removal, Disposal and Grading	29 ea	\$ 6,000.00	\$ 174,000	Demolition and removal of foundation concrete and steel. Site regraded to existing contours.
2.2 Transformer Pad Removal and Disposal	0 ea	\$ -	\$ -	N/A
2.0 Tower Foundation Totals:			\$ 174,000	

3.0 Other Structures

The pricing below excludes deduct for salvage value of the components.

	Quantity	Unit Cost	Extended Cost	Assumptions
3.1 87 meter Meteorological Towers	1 ea	\$ 75,000.00	\$ 75,000	
3.2 Substation Foundations, Fence, Steel and Grading	1 ea	\$215,000.00	\$ 215,000	
3.3 Substation Equipment Salvage	0 ea	\$ -	\$ -	Excluded
3.4 O & M Building Salvage, Fence Removal and Grading	1 ea	\$150,000.00	\$ 150,000	
3.0 Other Structures Totals:			\$ 440,000	

4.0 Tower Access and Site Roads

Aggregate base roads will be scarified, loaded and removed from site to a TBD location (within 10 miles roundtrip). Remaining subgrade will be decompacted and graded to match existing and natural grade. Any vegetation will be re-established.

Type: Average 16 ft wide roads with 8 inches of compacted aggregate base

	Quantity	Unit Cost	Extended Cost	Assumptions
4.1 Remove Access Roads	61,311 lf	\$ 10.00	\$ 613,110	Aggregate base will be removed and hauled off site. 4" of gravel 16' Wide.
4.0 Tower Access Road Totals:			\$ 613,110	

5.0 Collection System

Removal of termination sections near transformer to a depth 48" below existing ground line.

Type: Terminations

	Quantity	Unit Cost	Extended Cost	Assumptions
5.1 Remove collection system terminations	29 ea	\$ 1,450.00	\$ 42,050	
5.0 Collection System Totals:			\$ 42,050	

6.0 Mobilization/Demobilization

	Quantity	Unit Cost	Extended Cost	Assumptions
6.1 Mobilization/Demob	1 LS	\$200,000.00	\$ 200,000	
6.0 Mob/Demob Totals:			\$ 200,000	

7.0 Transmission Line Removal

	Quantity	Unit Cost	Extended Cost	Assumptions
7.1 Transmission Line Removal	15.2 MI	\$110,000.00	\$ 1,672,000	
7.0 Transmission Line Removal:			\$ 1,672,000	

Site Decommission Totals: \$ 3,510,910

Site Decommission per WTG: \$ 121,065.86

Notes:

1. The above information is based upon turbines that are 3.45 MWs in size.
2. For the purposes of the decommissioning cost estimates, it is assumed that the facility equipment will be removed to a depth of 4 feet below ground surface.
3. The above information and costs are based upon discussions information from equipment suppliers and contractors familiar with removal/refurbishment of sites. In addition, the above information and costs are based upon previous decommissioning documents/submittals for other wind plants.