A DECOMMISSIONING PLAN FOR

Agricola Wind Project

Cayuga County, New York

FEBRUARY 10, 2025

PREPARED FOR:

Agricola Wind, LLC

PREPARED BY:

Westwood

Westwood

Decommissioning Plan

Agricola Wind Project

Cayuga County, New York

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1.0 Introduction / Project Description

The Agricola Wind Project ("Project" or "Facility") is a wind power generation project proposed by Agricola Wind, LLC ("Applicant") in Cayuga County, New York. The Project includes the construction of permanent facilities of up to 24 Vestas V162 6.8-megawatt (MW) wind turbines, access roads, two meteorological (MET) towers, one aircraft detection lighting system (ALDS) tower, a substation, underground collection lines, and an operation and maintenance (O&M) building.

This Decommissioning and Site Restoration Plan (Plan) has been prepared in accordance with Chapter XI, Title 16, Part 1100 of the New York Codes, Rules and Regulations (NYCRR). The purpose of the Plan is to describe the means and methods that can be used to remove project facilities and reclaim, restore, and return the land altered during the construction and operation of the wind project to its predevelopment condition to the extent feasible. The Plan identifies components that may be removed and the areas that may be restored once the Project has surpassed the useful lifespan of the turbines and facilities.

The useful life of commercial size turbines is generally considered to be 30 years. At that time, the project will either be decommissioned or repowered with newer technology. This decommissioning plan reflects the full decommissioning of the Project, including removal of all infrastructure and equipment and reclamation of the site to match previous land use, unless otherwise specified.

2.0 Proposed Future Land Use

Prior to the development of the Project, the land use of the project area was primarily agriculture. After the developed areas of the Facilities are decommissioned, they will be returned to their predevelopment condition, either tilled to a farmable condition or revegetated to match-pre-construction conditions. Please refer to Section 3.2 for a detailed description of reclamation activities.

3.0 Engineering Techniques

Decommissioning of the Project includes multiple phases and activities such as:

- Application of necessary sediment and erosion controls during and following decommissioning activities.
- Public road modifications (if required) and access road improvements to accommodate heavy equipment traffic during decommissioning.
- Removal of aboveground components (turbines, transformers, and substation) for either resale or scrap.
- Removal of turbine foundations to a depth of four feet below grade.
- Removal of other underground components (junction boxes, transformer and substation foundations) to a depth of four feet below grade.
- Removal of access roads (unless the landowners request the roads to remain) and decompaction.
- Reclamation, re-grading, and restoration of disturbed areas including topsoil reapplication and decompaction of soils.
- Repair and/or restoration of public roads and culverts to pre-decommissioning conditions, as required.

During decommissioning, the Applicant shall consult landowners to identify the extent and type of work to be completed. Some Project infrastructure, such as the access roads, may be left in place at the landowners' requests as may be allowed by federal, state, and local laws at the time of decommissioning. Underground utility lines, if deeper than four feet below ground surface elevation, may be left in place to minimize land disturbance and associated impacts to future land use.

Decommissioning will include the removal and transportation of all turbine components from the Project site. Decommissioning will also include the removal of electrical components, foundations, and any other associated facilities in the manner described in the Plan, unless otherwise agreed upon by Applicant and the applicable landowner(s) as may be allowed by Federal, State, and local laws at the time of decommissioning. All dismantling, removal, recycling, and disposal of materials generated during decommissioning will comply with rules, regulations, and prevailing Federal, State, and local laws at the time decommissioning is initiated and will use approved local or regional disposal or recycling sites as available. Recyclable materials will be recycled to the furthest extent practicable. Non-recyclable materials will be disposed of in accordance with State and Federal law.

3.1 Decommissioning of Project Components

3.1.1 Public Road Improvement and Access Road Modifications and Removal

As the cost estimate is based on scrapping and recycling turbine components where possible, sections of public roads that have insufficient strength to accommodate the construction traffic necessary for decommissioning will need to be improved prior to the start of hauling operations. Intersection turning radius modifications are not anticipated since turbine components will be cut to fit on standard semitrailer trucks. The roads subjected to decommissioning traffic will be restored to a condition equal to or better than the condition of the road prior to decommissioning activities. Aggregate removed from the Project access roads is a potential source for the public road restoration material. A pre-decommissioning road survey, similar to a pre-construction survey, may be prepared so that road conditions pre- and post-decommissioning can be accurately assessed.

3.1.2 Crane Path and Crane Pad Preparation and Removal

To facilitate the movement of the large industrial cranes used to disassemble the turbines, crane paths will be required between the turbine sites. A crane path network was designed for the construction of the wind project. The same corridors are likely to be used for decommissioning. Some turbine access roads may be temporarily widened from their operational width of 20 feet to approximately 40 feet wide by compacting in place soils to create crane shoulders on roads that were configured to accommodate crane travel during the construction of the Facility. Preparations include compaction of the native soils and construction of temporary road crossings, crane mat crossings, low water crossings, and/or temporary culverts to cross streams. Following disassembly of the wind turbines, the temporary crossings will be removed, and the crossing areas will be restored to pre-decommissioning conditions. Crane paths will then be restored to pre-construction conditions.

3.1.3 Wind Turbine Removal

Each wind turbine consists of steel tower segments, a nacelle, a rotor and hub assembly, and three blades. These modular components can be disassembled and then processed into pieces small enough (less than 40 feet by eight feet by eight feet and less than 20 tons) to be loaded onto standard semitrailer trucks and transported off site. The components of the wind turbines will be cut into pieces

sized to meet recycling requirements so the scrap value may be maximized. The components will then be loaded on tractor-trailers and transported to a licensed recycling facility. If there are facilities for recycling of turbine blades at the time the turbines are decommissioned, the blades will be transported to the facility for recycling, if cost effective. At this time, blade recycling facilities are not operating at the scale necessary for the volume of waste that will be generated from decommissioning this project. As a result, this cost estimate assumes the blades and other components that cannot be recycled will be disposed of at a licensed landfill.

3.1.4 Turbine Foundation Removal and Restoration

The turbine foundations are constructed from concrete and rebar. Little topsoil stripping will be required since the portion of the foundation less than four feet deep is within the gravel ring around each turbine. The foundation will first be exposed using backhoes or other earth moving equipment. The pedestal (upper part of the turbine foundation) will then be removed to a depth of at least four feet below grade using hydraulic vibratory hammers to break up the concrete. The rebar can be cut with torches or cutoff saws. The concrete will be broken into pieces sized for transport. The foundation debris will be hauled off site to be recycled or disposed of, depending on market prices for aggregate at the time of decommissioning. The rebar will be recycled.

Following removal of the turbine foundation, the resulting void will be backfilled with native subsoils and compacted to at least 90% of the fill material's standard Proctor density. Topsoil will be reapplied to the site and graded to match surrounding grade to preserve existing drainage patterns. The topsoil and subsoil will be decompacted to a minimum depth of 18 inches and revegetated to match pre-construction conditions.

3.1.5 Meteorological (MET) Towers

Following disconnection of electrical components, the MET and ADLS towers will be gradually lowered to the ground for disassembly. The steel structures will be cut into pieces sized to meet recycling requirements so the scrap value may be maximized. The components will then be loaded on tractor-trailers and transported to a metal recycling facility.

The concrete pads, along with any anchoring components, will be excavated to a depth of 4 feet. Concrete will be broken into transportable pieces and hauled off site. Following removal of the foundations, subsoil will be decompacted to a minimum depth of 18 inches. Topsoil will be reapplied to match the surrounding grade.

3.1.6 Access Roads

Removal of access roads will entail removal of the road base aggregate and any other materials used for constructing the roads. During removal, the topsoil adjacent to both sides of the roads will be stripped and stockpiled in a windrow paralleling the road. The road base materials will then be removed by bulldozers, wheeled loaders, or backhoes and hauled off site in dump trucks to be recycled or disposed of at an off-site facility. On-site processing may allow much of the aggregate to be re-used to improve public roads. The aggregate base can often be used by local landowners for driveway or clean fill. Another option is to use the aggregate base as "daily cover" at a landfill, where it is usually accepted without cost. If geotextile fabric was utilized under the aggregate base, it will be removed and disposed of in a landfill off site. The access road removal will proceed from the turbine area to the public roads to

limit tracking and provide stable access during removal. Following removal, topsoil will be reapplied and graded to blend with surrounding contours to promote pre-construction drainage patterns. Topsoil to cover the access roads, turbine rings, and met tower rings will be acquired from the areas where it was stockpiled (or wasted) during the original construction. Since topsoil stayed with each landowner during the construction of the wind farm, there will be adequate topsoil to restore each area to its pre-construction condition. The soil and topsoil will then be decompacted to a minimum depth of 18 inches and restored to pre-construction tillable conditions or revegetated.

3.1.7 Underground Electrical Collection Lines

The electrical cables and fiber optic conduits contain no material known to be harmful to the environment, will be installed at a depth of 4 feet, and will be left in place, non-functional. In those limited instances where cables are buried to a depth less than four feet, such as cables entering and exiting the turbine foundations, junction boxes, or substation components, those cables will be removed. Following any necessary removal, the area affected will be restored by reapplication of topsoil to match the surrounding grade and preserve existing drainage patterns. The topsoil and subsoil will be decompacted and tilled to farmable conditions.

3.1.8 Substation

Decommissioning of the project substation will be performed with the rest of the Project. All steel, conductors, switches, transformers, and other components of the substation will be disassembled and taken off site to be recycled or reused. Foundations and underground components will be removed to a depth of four feet. The rock base will be removed using bulldozers and backhoes or front loaders. The material will be hauled from the site using dump trucks to be recycled or disposed at on off-site facility. Additionally, any permanent stormwater treatment facilities (e.g., infiltration ponds and engineered drainage swales) will be removed. Topsoil will be reapplied to match surrounding grade to preserve existing drainage patterns. Topsoil and subsoil will be decompacted to a minimum depth of 18 inches and the site will be revegetated to match pre-construction conditions.

3.1.9 Operations and Maintenance Building

The O&M Building is a sturdy, general purpose steel building. If the building is not repurposed, decommissioning will include disconnection of the utilities and demolition of the building structure, foundation, rock base parking lot, and associated vegetated/stormwater handling facilities. All associated materials will be removed from the site using wheeled loaders or backhoes and bulldozers and hauled off site in dump trucks. All recyclable materials will be brought to appropriate facilities and sold; the remaining materials will be disposed of at an approved landfill facility. Subgrade soils will be decompacted and graded to blend with the adjacent topography. Topsoil will be reapplied to match existing surrounding grade to preserve existing drainage patterns, and the site will be tilled either to a farmable condition or re-vegetated, depending upon location.

3.2 Reclamation

In addition to the reclamation activities described above for each decommissioning activity, all unexcavated areas compacted by equipment and activity during the decommissioning will be decompacted to a depth of 18 inches or to a depth as needed to ensure proper density of topsoil consistent and compatible with the surrounding area and associated land use. All materials and debris

associated with the Project decommissioning will be removed and properly recycled or disposed of at off-site facilities.

As necessary, the topsoil will be stripped and isolated prior to removal of structures and facilities for reapplication to promote future land use activities. Preservation of topsoil will be key for re-establishing vegetation at the site. The topsoil will be reapplied following backfill, as necessary, and graded to blend with adjacent contours to maintain pre-construction drainage patterns. Decompaction of the soil and topsoil will be applied to a minimum depth of 18 inches.

Areas formerly used for agriculture shall be re-tilled to a farmable condition. In areas not to be used for crops, the topsoil will then be revegetated using seed mixes approved by the local Farm Service Agency, Soil and Water Conservation District, Natural Resource Conservation Service, or other state agency. The selected seed mix must be suitable for the site's annual precipitation and elevation. Temporary erosion protection such as nurse crop (annual grass to aid in establishment of permanent species), mulch, hydromulch, or erosion control blanket will be applied in accordance with the requirements of the project Stormwater Pollution Prevention Plan (SWPPP) until permanent vegetation has been established.

4.0 Best Management Practices (BMPs)

During decommissioning, erosion and sediment control BMPs will be implemented to minimize potential for erosion of site soils and sedimentation of surface waters and waters of the state. Because decommissioning will entail disturbance of more than one acre of soil, the Applicant will prepare a SWPPP and obtain coverage under the state-specific National Pollutant Discharge Elimination System (NPDES) permit prior to initiating soil disturbing activities. Potential BMPs to be implemented during decommissioning activities are described below and will be subject to refinement in the SWPPP. The decommissioning team will review the permitting requirements at the time of decommissioning and obtain any other necessary permits, which may include a US Army Corps of Engineers (USACE) Section 404 Permit to Discharge Dredged or Fill Material.

4.1 Erosion Control

Erosion control measures will be refined based on the standard of practice current at the time the SWPPP is developed for decommissioning. All disturbed areas without permanent impermeable or gravel surfaces, or planned for use as crop land, will be vegetated for final stabilization. All slopes steeper than 4:1 should be protected with erosion control blankets. Restoration should include seed application prior to application of the blanket. All slopes 4:1 or flatter should be restored with seed and mulch, which will be disc anchored.

4.2 Sediment Control

Sediment controls, such as silt fence, fiber logs, dewatering practices, construction entrances, and sedimentation traps and/or basins will be implemented during construction to prevent the transport of sediment off-site during decommissioning activities. Street sweeping/scraping will also be implemented to mitigate potential tracking of sediment onto public roadways.

4.3 Controlling Stormwater Flowing Onto and Through the Project

Given the low gradient of the slopes in the project area, controlling stormwater flow that enters the project area will likely require minimal effort during decommissioning activities. Only newly disturbed areas may require new, temporary stormwater control.

4.4 Permitting

All decommissioning and reclamation activities will comply with Federal and State permit requirements. Decommissioning activities that will disturb more than one acre of soil will require coverage under the New York State Pollutant Discharge Elimination System (SPDES) permit for construction stormwater. The permits will be applied for and received prior to decommissioning construction activities commencing. A SWPPP will be developed prior to filing for construction stormwater permit coverage.

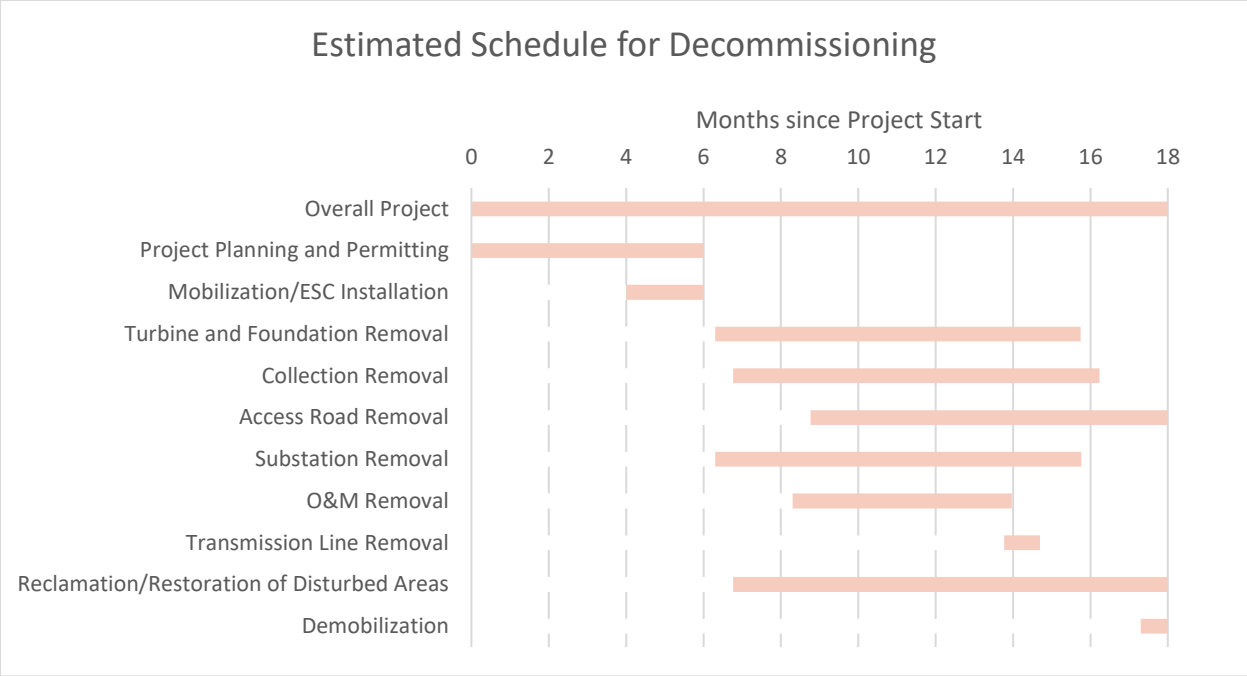
Wetlands and waters permits will be obtained from the USACE or New York State Office of Renewable Energy Siting & Electric Transmission (ORES). A Spill Prevention, Control, and Countermeasures (SPCC) Plan for decommissioning will likely also be required for decommissioning work.

4.5 Health and Safety Standards

Work will be conducted in strict accordance with the Applicant's health and safety plan. The construction contractor hired to perform the decommissioning will also be required to prepare a site-specific health and safety plan. All Facility workers, including subcontractors, will be required to read, understand, and abide by the plans. A Facility safety office will be designated by the construction contractor to ensure compliance. This official will have stop-work authority over all activities at the Facility, should unsafe conditions or lapses in the safety plan be observed.

5.0 Timeline

Decommissioning of the Project will be initiated if the project has surpassed the useful lifespan of the turbines and facilities. It is anticipated that the decommissioning activities can be completed in an 18-month period. Planning, permitting, contracting mobilization, and site preparation activities will be completed within a period of approximately six months, followed by approximately one year of deconstruction and restoration activities. The estimated costs for decommissioning are tied to assumptions about the amount of equipment mobilized, the crew sizes, weather and climate conditions, and the productivity of the equipment and crews. A potential schedule for decommissioning is shown in the chart below. Please note that the order and duration of the activities shown below are subject to change based on conditions at the time of decommissioning.



6.0 Decommissioning Costs

The cost estimate for decommissioning and reclamation of the Project was prepared in current dollars, with the salvage value of equipment or materials calculated separately. The estimate includes:

(i) An analysis of the physical activities necessary to implement the approved reclamation plan, with physical construction and demolition costs based on applicable Department of Transportation unit bid prices from surrounding states and RS Means material and labor cost indices;

(ii) The level of effort or number of crews required to perform each of the activities; and

(iii) An amount to cover contingencies above the calculated cost.

The following information was used to develop the cost estimate:

1. Project quantities for the Project are based on Civil Plans prepared for Agricola Wind, LLC dated August 23, 2024.
2. A project of this size and complexity requires a half-time project manager with full-time support staff.
3. Common labor will be used for the majority of tasks, supplemented by electricians, steel workers, and equipment operators where labor rules may require. The labor rates reflect union labor rates.
4. Turbines that are not resold will be assumed to have all applicable components recycled as scrap. The estimate uses a current structural scrap price of $325 per ton, in the East Coast, based on prices posted on scrapmonster.com, (08/26/2024). The posted prices are three months old. The posted spot prices used in the cost estimate were discounted by twenty-five percent (25%) to reflect the difficultly of realizing spot prices from local recyclers.

5. Electrical transformers have significant value due to aluminum or copper used in the windings and the steel used in other parts of the transformer. Newer transformers can be resold. Older transformers are recycled as scrap. Few companies accept used transformers for resale or recycling, so finding pricing is difficult. For this estimate, we used pricing posted on scrapmonster.com of $0.45 per pound for used copper transformer scrap. We assumed the posted price is similar to the price offered by Auburn Metal Processing, LLC located in Auburn, NY, which was identified as the regional transformer recycling location.
6. Spot prices for insulated copper wire (85% recovery) are $1.68 per pound, electrical motors/generators (used to estimate the values of the turbine generators) are $0.46 per pound, E.C. aluminum wire is $1.15 per pound, and steel cabling is $0.16 per pound. The posted spot prices used in the cost estimate were discounted be twenty-five percent (25%) to reflect the difficultly of realizing spot prices from local recyclers.
7. The NYCRR requires a fifteen (15%) contingency be added to the cost estimate for calculating the bond amount.

The total estimated cost of the decommissioning of the Agricola Wind Project is approximately $7,009,846 ($292,077 per turbine), including crop loss. Estimated salvage/scrap value of the turbines, transformers, and other materials is approximately $2,593,139. The net decommissioning costs after accounting for resale and salvage values is approximately $4,416,707, or $184,029 per turbine. Please see the following tables for a summary of decommissioning costs per town. See Attachment A for the detailed cost estimates per town.

Table 1: Decommissioning Costs

Item	Scipio	Venice	Project Total
Decommissioning Cost	$ 2,901,445	$ 4,108,402	$ 7,009,846
Minus Salvage Value	$ 1,288,296	$ 1,304,844	$ 2,593,139
Net Decommissioning Cost	**$ 1,613,149**	**$ 2,803,558**	**$ 4,416,707**

The decommissioning cost estimates for both Scipio and Venice shall be updated once every three (3) years throughout the life of the project per Town requirements.

Attachment A

Decommissioning Cost Estimate

Agricola Wind Project (Scipio) Decommissioning Cost Estimate

Number of Turbines	12	Each		
	Quantity	Unit	Unit Cost	Total Cost
Mobilization/Demobilization	1	Lump Sum	$135,000.00	$135,000
Permitting				
Local, State, and Federal Permits (SWPPP, Local and State Highway Work Permits, Section 404 Permits, etc.)	1	Lump Sum	$35,000.00	$35,000
Subtotal Permits				**$35,000**
Wind Turbine Generators				
Disconnect Turbine Wiring	12	Each	$3,060.80	$36,730
Dismantle Turbine Tower, Hub, and Blades	12	Each	$18,366.51	$220,398
Process to Size and Load Turbine Components	4,529	Tons	$153.65	$695,881
Haul Turbine Components Offsite for Recycling (except blades)	4,529	Tons	$7.48	$33,877
Haul Turbine Components For Disposal (except blades)	869	Tons	$10.59	$9,203
Turbine Component Disposal (except blades)	869	Tons	$81.00	$70,389
Haul Fiberglass Blades For Disposal	387	Tons	$173.44	$67,121
Fiberglass Blades Recycling	387	Tons	$550.00	$212,850
Excavate Around Turbine Foundation	12	Each	$16.59	$199
Remove Turbine Foundation and Load	504	Cubic Yards	$241.81	$121,872
Backfill Excavation Area from Turbine Foundation Removal	12	Each	$170.61	$2,047
Haul Concrete (Turbine Foundation)	1,021	Tons	$17.45	$17,816
Disposal of Concrete from Turbine Foundation	504	Cubic Yards	$31.25	$15,750
Decompact Wind Turbine Generator Site	12	Each	$160.81	$1,930
Grade Wind Turbine Generator Site	12	Each	$2,545.53	$30,546
Erosion and Sediment Control at Turbine/Transformer Site	12	Each	$1,463.98	$17,568
Topsoil and Revegetation at Turbine/Transformer Sites	12	Each	$1,073.38	$12,881
Till to Farmable Condition	8.7	Acres	$177.52	$1,544
Subtotal Wind Turbine Generators				**$1,568,602**
Electrical Collection				
Removal of Underground Collector System Cables Shallower than 4 feet	420	Linear Feet	$13.33	$5,599
Haul Underground Collector System Cables	3.8	Tons	$7.48	$28
Disposal of Removed Cables (See Salvage Value)	3.8	Tons	$0.00	$0
Removal of Junction Box	2	Each	$100.00	$200
Erosion and Sediment Control for Cable Removal	1,400	Feet	$4.66	$6,524
Topsoil and Revegetation at Removed Cable Locations	0.7	Acres	$1,488.30	$1,042
Erosion and Sediment Control at Junction Box Location	80	Feet	$4.66	$373
Topsoil and Revegetation at Junction Box Locations	0.02	Acres	$1,488.30	$30
Subtotal Electrical Collection				**$13,795**
Access Roads				
Remove and Load Gravel Surfacing from Access Roads	5,706	Cubic Yards	$2.75	$15,692
Haul Gravel Removed from Access Roads	9,243	Tons	$17.45	$161,290
Disposal of Gravel Removed from Access Roads	9,243	Tons	$0.00	$0
Remove and Load Geotextile Fabric	32,094	Square Yards	$0.91	$29,205
Haul Geotextile Fabric	7.1	Tons	$17.45	$124
Dispose of Geotextile Fabric	7.1	Tons	$31.25	$222
Remove and Load Culvert from Beneath Access Roads	9	Each	$448.00	$4,032
Haul Culvert Removed from Access Roads	2.9	Tons	$17.45	$51
Disposal of Culverts	2.9	Tons	$31.25	$91
Decompact Access Road Corridor	14,442	Linear Feet	$0.08	$1,155
Grade Access Road Corridor	14,442	Linear Feet	$1.51	$21,807
Erosion and Sediment Control Along Access Roads	10,832	Linear Feet	$4.66	$50,477
Topsoil and Revegetation on Removed Access Road Area	8.0	Acres	$1,488.30	$11,906
Subtotal Access Roads				**$296,053**

Crane Paths				
Crop Loss (11.4 Acres)	11.4	Acres	$1,300.00	$14,820
Installation and Removal of Low Water Crossing (Crane Mats)	1	Each	$3,400.00	$3,400
Haul Low Water Crossing Materials Removed from Path	1	Each	$200.00	$200
Decompaction of Crane Path	12,416	Linear Feet	$0.20	$2,542
Erosion and Sediment Control Along Crane Path	1,242	Linear Feet	$4.66	$5,786
Revegetation or Farm Field Restoration on Decompacted Crane Path	11.4	Acres	$1,488.30	$16,967
Subtotal Crane Paths				**$43,715**
Project Management and Construction Oversight				
Note: Durations for management/oversight have been scaled to reflect decommissioning efforts within the jurisdiction reflected in this estimate)				
Project Manager (Half-Time)	36	Weeks	$1,874.50	$67,482
Superintendent	36	Weeks	$3,525.00	$126,900
Field Engineer	36	Weeks	$3,269.00	$117,684
Clerk	36	Weeks	$750.00	$27,000
Environmental and Agricultural Monitor	36	Weeks	$2,549.00	$91,764
Subtotal Project Management and Construction Oversight				**$430,830**
Total Direct Costs				**$2,522,995**
Contingency (15%)	15%	Percent		$378,449
Total Cost				**$2,901,444**
Salvage/Recycle				
Turbine Towers (Structural Steel)	3984	Tons	$243.75	$971,100
Turbine Nacelles (Structural Steel)	869	Tons	$243.75	$211,819
Turbine Generators	286440	Pounds	$0.35	$98,822
Aluminum Electrical Conductor (Supported)	7,600	Pounds	$0.86	$6,555
Subtotal Salvage				**$1,288,296**
Total Demolition Minus Resale and Salvage Value				**$1,613,149**

Agricola Wind Project (Venice) Decommissioning Cost Estimate

	Quantity	Unit	Unit Cost	Total Cost
Mobilization/Demobilization	1	Lump Sum	$193,000.00	$193,000
Mobilization is estimated to be 7% of total costs.				
Permitting				
County/Municipal Permits	1	Lump Sum	$10,000.00	$10,000
State Permits (SWPPP, SPCC)	1	Lump Sum	$25,000.00	$25,000
Subtotal Permits				**$35,000**
Wind Turbine Generators				
Disconnect Turbine Wiring	12	Each	$3,060.80	$36,730
Dismantle Turbine Tower, Hub, and Blades	12	Each	$18,366.51	$220,398
Process to Size and Load Turbine Components	4,529	Tons	$153.65	$695,881
Haul Turbine Components Offsite for Recycling (except blades)	4,529	Tons	$7.48	$33,877
Haul Turbine Components For Disposal (except blades)	869	Tons	$10.59	$9,203
Turbine Component Disposal (except blades)	869	Tons	$81.00	$70,389
Haul Fiberglass Blades For Disposal	387	Tons	$173.44	$67,121
Fiberglass Blades Recycling	387	Tons	$550.00	$212,850
Excavate Around Turbine Foundation	12	Each	$16.59	$199
Remove Turbine Foundation and Load	504	Cubic Yards	$242.00	$121,968
Backfill Excavation Area from Turbine Foundation Removal	12	Each	$170.61	$2,047
Haul Concrete (Turbine Foundation)	1,021	Tons	$17.45	$17,816
Disposal of Concrete from Turbine Foundation	504	Cubic Yards	$31.25	$15,750
Decompact Wind Turbine Generator Site	12	Each	$160.81	$1,930
Grade Wind Turbine Generator Site	12	Each	$2,545.53	$30,546
Erosion and Sediment Control at Turbine/Transformer Site	12	Each	$1,463.98	$17,568
Topsoil and Revegetation at Turbine/Transformer Sites	12	Each	$1,073.38	$12,881
Till to Farmable Condition	8.7	Acres	$177.52	$1,544
Subtotal Wind Turbine Generators				**$1,568,698**
Met and ADLS Towers				
Disconnect Tower Wiring	3	Each	$1,530.40	$4,591
Dismantle, Disassemble, and Load Tower Components	3	Each	$5,208.79	$15,626
Haul Tower Components Off Site	12	Tons	$7.48	$90
Excavate Around Tower Foundation	3	Each	$4.62	$14
Remove Tower Foundation and Load	3.5	Cubic Yards	$241.81	$846
Haul Concrete (Tower Foundation)	0.3	Tons	$17.45	$5
Disposal of Concrete from Tower	0.3	Tons	$31.25	$9
Grade Tower Site	3	Each	$1,417.27	$4,252
Erosion and Sediment Control at Tower Site	3	Each	$466.00	$1,398
Topsoil and Revegetation at Tower Site	0.2	Acre	$1,488.30	$298
Subtotal Met/ADLS Towers				**$27,130**
Electrical Collection				
Removal of Underground Collector System Cables Shallower than 4 feet	160	Linear Feet	$40.00	$6,400
Haul Underground Collector System Cables	1.5	Tons	$7.48	$11
Disposal of Removed Cables (See Salvage Value)	1.5	Tons	$0.00	$0
Removal of Junction Box	4	Each	$100.00	$400
Removal of Overhead Collection Line Cables	842	Feet	$7.90	$6,652
Loadout Overhead Cables	1.6	Tons	$37.00	$59
Haul Overhead Cables	1.6	Tons	$7.48	$12
Disposal of Overhead Cables (See Salvage Value)	1.6	Tons	$0.00	$0
Remove and Load Timber Poles and Hardware	4	Each	$1,731.39	$6,926
Haul Timber Poles and Hardware for Disposal	2	Loads	$316.76	$634
Disposal of Poles and Hardware	8	Tons	$100.00	$800
Erosion and Sediment Control for Cable Removal	2,442	Feet	$4.66	$11,380
Topsoil and Revegetation at Removed Cable and Tower Locations	1.2	Acres	$1,488.30	$1,786
Erosion and Sediment Control at Junction Box Location	160	Feet	$4.66	$746
Topsoil and Revegetation at Junction Box Locations	0.04	Acres	$1,488.30	$60
Subtotal Electrical Collection				**$36,115**

Access Roads				
Remove and Load Gravel Surfacing from Access Roads	12,008	Cubic Yards	$2.75	$33,022
Haul Gravel Removed from Access Roads	19,453	Tons	$17.45	$339,455
Disposal of Gravel Removed from Access Roads	19,453	Tons	$0.00	$0
Remove and Load Geotextile Fabric	67,546	Square Yards	$0.91	$61,682
Haul Geotextile Fabric	15	Tons	$17.45	$262
Dispose of Geotextile Fabric	15	Tons	$31.25	$469
Remove and Load Culvert from Beneath Access Roads	8	Each	$448.00	$3,584
Haul Culvert Removed from Access Roads	2.6	Tons	$17.45	$45
Disposal of Culverts	2.6	Tons	$31.25	$81
Decompact Access Road Corridor	30,396	Linear Feet	$0.08	$2,432
Grade Access Road Corridor	30,396	Linear Feet	$1.51	$45,898
Erosion and Sediment Control Along Access Roads	22,797	Linear Feet	$4.66	$106,234
Topsoil and Revegetation on Removed Access Road Area	16.7	Acres	$1,488.30	$24,855
Subtotal Access Roads				**$618,018**
Crane Paths				
Crop Loss (20.9 Acres)	20.9	Acres	$1,300.00	$27,170
Installation and Removal of Low Water Crossing (Crane Mats)	7	Each	$3,400.00	$23,800
Haul Low Water Crossing Materials Removed from Path	7	Each	$200.00	$1,400
Decompaction of Crane Path	22,781	Linear Feet	$0.06	$1,399
Erosion and Sediment Control Along Crane Path	2,278	Linear Feet	$4.66	$10,616
Revegetation or Farm Field Restoration on Decompacted Crane Path	20.9	Acres	$1,488.30	$31,105
Subtotal Crane Paths				**$95,491**
Substation				
Disassembly and Removal of Main Power Transformer(s)	1	Each	$4,500.00	$4,500
Freight Transformer(s) Offsite	1	Each	$673.20	$673
Excavate Around Transformer Foundation(s)	1	Each	$1,581.79	$1,582
Remove Complete Transformer Foundation(s)	1	Each	$17,662.68	$17,663
Backfill Excavation Area from Transformer Foundation Removal	1	Each	$252.59	$253
Haul Concrete (Transformer, Switch Gear, etc. Foundations)	170	Tons	$17.45	$2,968
Disposal of Concrete from Transformer Foundation	170	Tons	$31.25	$5,316
Demolish Substation Site Improvements (fences, etc.)	1	Lump Sum	$3,500.00	$3,500
Demolish Control Building and Foundation	1	Lump Sum	$12,000.00	$12,000
Remove Medium/High Voltage Equipment	1	Lump Sum	$3,500.00	$3,500
Remove Structural Steel Substation Frame	1	Lump Sum	$3,500.00	$3,500
Haul - Demolition Materials, Removed Equipment & Structural Steel	1	Lump Sum	$1,496.00	$1,496
Disposal of Demolition Materials, Removed Equipment and Structural Steel (Salvag	1	Lump Sum	$0.00	$0
Remove and Load Gravel Surfacing from Substation Site	895	Cubic Yards	$2.75	$2,461
Haul Gravel Removed from Substation Site	1,450	Tons	$17.45	$25,301
Decompact Substation Site	1	Acre	$222.97	$247
Grade Substation Site	1	Acre	$4,094.80	$4,543
Erosion and Sediment Control at Substation Site	660	Linear Feet	$4.66	$3,073
Topsoil and Revegetation at Substation Site	1	Acre	$1,488.30	$1,651
Subtotal Substation				**$94,227**
O&M Building				
Demolish O&M Building and Foundation	1	Lump Sum	$5,000.00	$5,000
Demolish O&M Site Improvements (fences, etc.)	1	Lump Sum	$3,000.00	$3,000
Haul Concrete (O&M Building Foundation)	3,706	Ton	$17.45	$64,665
Crush Concrete	3706	Ton	$28.00	$103,760.72
Disposal of Concrete from O&M Building Foundation	3,706	Ton	$31.25	$115,804
Cap and Abandon Well	1	Lump Sum	$1,000.00	$1,000
Remove & Restore Septic and Drainfield area	1	Lump Sum	$3,000.00	$3,000
Disposal of O&M Building Demolition and Removed Site Improvements	1	Lump Sum	$2,500.00	$2,500
Remove and Load Gravel Surfacing of O&M Site	383	Cubic Yards	$2.75	$1,053
Haul Gravel Removed from O&M Site	383	Cubic Yards	$17.45	$6,683
Decompact O&M Building Site	0.5	Acre	$222.97	$111
Grade O&M Building Site	0.5	Acre	$4,094.80	$2,047
Erosion and Sediment Control at O&M Building Site	432	Linear Feet	$4.66	$2,013
Topsoil and Revegetation at O&M Building Site	0.5	Acres	$1,488.30	$744
Subtotal O&M Building				**$311,383**

Project Management and Construction Oversight				
Note: Durations for management/oversight have been scaled to reflect decommissioning efforts within the jurisdiction reflected in this estimate)				
Project Manager (Half-Time)	42	Weeks	$1,874.50	$78,729
Superintendent	42	Weeks	$3,525.00	$148,050
Field Engineer	42	Weeks	$3,269.00	$137,298
Clerk	42	Weeks	$750.00	$31,500
Environmental and Agricultural Monitor	42	Weeks	$2,549.00	$107,058
Subtotal Project Management and Construction Oversight				**$502,635**
Total Direct Costs				**$3,481,697**
Contingency (18%)	18%	Percent		$626,705
Total Cost				**$4,108,402**
Salvage/Recycle				
Turbine Towers (Structural Steel)	3984	Tons	$243.75	$971,100
Turbine Nacelles (Structural Steel)	869	Tons	$243.75	$211,819
Met Towers (Structural Steel)	11	Tons	$243.75	$2,681
Substation (Structural Steel)	10	Tons	$243.75	$2,438
Turbine Generators	286,440	Pounds	$0.35	$98,822
Aluminum Electrical Conductor (Supported)	3,000	Pounds	$0.86	$2,588
Aluminum and Steel Conductor (Suspended-Aluminum Weight)	1,984	Pounds	$0.86	$1,711
Aluminum and Steel Conductor (Suspended-Steel Weight)	1,216	Pounds	$0.12	$148
Transformers (copper windings)	9,000	Pounds	$0.34	$3,038
Transformers (oil)	15,000	Gallons	$0.70	$10,500
Subtotal Salvage				**$1,304,844**
Total Demolition Minus Resale and Salvage Value				**$2,803,558**