

A DECOMMISSIONING AND SITE RECLAMATION PLAN FOR

Lotus Wind Project

Macoupin County, Illinois

SEPTEMBER

PREPARED FOR:



PREPARED BY:

Westwood

Decommissioning and Site Reclamation Plan

Lotus Wind Project – Macoupin County

Macoupin County, Illinois

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Attachment A: Decommissioning and Reclamation Cost Estimates

Attachment B: Draft Decommissioning Bond

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1.0 Introduction / Project Description

The Lotus Wind Project (Facility or WECS Project) is a wind power generation project proposed by Apex Clean Energy, Inc. and to be owned and operated by Lotus Wind, LLC, a Delaware limited liability company, or its successors-in-interest or assigns (collectively, the Applicant) in Macoupin and Morgan Counties, Illinois. In Macoupin County (County), the Facility will include the construction of wind turbines, access roads, underground collection lines and other electrical equipment, a light detection and ranging (LiDAR) tower, and an operations and maintenance (O&M) facility. Multiple turbine models and configurations are still being considered at this time, but the final design will be selected from one of the following options:

- 45 Vestas V163 4.5-megawatt (MW) wind turbines (113-meter hub height)
- 45 Vestas V166 4.5-MW turbines (119-meter hub height)
- 34 Vestas V162 6.0-MW turbines (119-meter hub height)
- 34 Vestas V162 6.0-MW turbines (105-meter hub height)
- 41 GE model turbines comprising 26 GE 5.8-MW turbines (117-meter hub height) plus 15 GE 3.4-MW turbines (117-meter hub height)

Due to the various design options still being considered, the most conservative turbine arrangement, representing the largest number of access roads and greatest linear feet of collection lines, was used as the design basis for all five cost estimates for consistency.

This Decommissioning and Reclamation Plan (Plan) has been prepared in accordance with Macoupin County Ordinance No. O-2023.02 (Wind Energy Conversion Systems (WECS) Siting Ordinance) (“WECS Ordinance”), adopted April 14, 2021, as amended by Macoupin County Ordinance No. O-2023.0 (Updated Wind Energy Conversion Systems (WECS) Siting Ordinance) (“Updated WECS Ordinance”) adopted September , 2023, the Macoupin County Ordinance No. O-2023.07, adopted June 14, 2023, which approved the Application of the Applicant for the WECS Siting Approval Permit for the WECS Project (“WECS Siting Approval Permit Ordinance”), and the provisions of the Illinois Department of Agriculture (IDOA) Agricultural Impact Mitigation Agreements (AIMA) entered into by the Applicant with the Illinois Department of Agriculture (“IDOA”) on February 23, 2023 guidelines for all above ground and below ground WECS facilities of the approved Siting Approval Permit. The purpose of the Plan is to describe the means and methods that can be used to remove the Facility and reclaim, restore, and return the land altered during the construction and operation of the Facility to its predevelopment condition. The Plan applies to all participating parcels in the WECS Project, as demonstrated on the Siting Approval Permit Application.

The Applicant further agrees to comply with its stated commitments as set forth at Section 3.8 (Agricultural Impact Mitigation Agreement) and Section 4.14 (Agricultural Impact Mitigation Agreement) of the Application (See, Appendix D.1.), except that the Applicant, and its successor-in-interest and assigns, shall comply with Section X (Decommissioning and Site Reclamation Plan Required) of the WECS Ordinance, as amended from time to time to conform to this WECS Siting Approval Ordinance and/or applicable State law, including: Subsection X.E.2 (Estimating the Cost of Decommissioning) of the WECS Ordinance which was amended to read as follows: “A second Decommissioning and Site Reclamation Plan prepared by the Applicant’s Professional Engineer, at the Applicant’s cost, shall be filed with the County on or before the end of the tenth (10th) year of the Commercial Operation Date. The Second Decommissioning and

Site Reclamation Plan shall be automatically updated to include a re-evaluation of the estimated costs of Deconstruction and restoration activities of the WECS Project after the tenth (10th) anniversary of the Commercial Operation Date, and every five (5) years thereafter, based on the re-evaluation work performed by an independent third-party Professional Engineer licensed in the State of Illinois and selected by the County Engineer or its designee ("Re-evaluation Report"). The County shall provide the Applicant with a copy of the final version of the Re-evaluation Report within thirty (30) calendar days of its delivery to the County Engineer or its designee. Based on each Re-evaluation Report, the Applicant shall provide an updated level of Financial Assurance to complete the Deconstruction and restoration activities, as determined by the Re-evaluation Report, to the County within sixty (60) calendar days of its receipt of each Re-evaluation Report. The Applicant shall be responsible for the payment of the costs and fees of each Re-evaluation Report prepared by the third-party Professional Engineer. Failure to provide the updated Finance Assurance as required by this Section shall be considered a default under Section XI (Remedies) of the WECS Ordinance."

It is agreed by the Applicant and Macoupin County that the terms, conditions, provisions set forth in the Updated WECS Ordinance, the WECS Siting Approval Permit Ordinance and the AIMA, as those documents currently exist or as they are amended from time to time with respect to the Facility, govern this Plan and the Facility. In the event of conflict or inconsistency between any term, condition or provision of this Plan and any term or provisions contained in the Updated WECS Ordinance, the WECS Siting Approval Permit Ordinance and the AIMA, the terms, conditions and provisions of the Updated WECS Ordinance, the WECS Siting Approval Permit Ordinance and the AIMA shall govern and control the interpretation of the term, condition or provision. The order of priority among these documents is as follows: First Priority: the WECS Siting Approval Permit Ordinance; Second Priority: the Updated WECS Ordinance; Third Priority: the AIMA; and Fourth Priority: this Plan.

The Plan identifies components that are to be removed and the areas that are to be restored once decommissioning is triggered. Decommissioning can be triggered in any one of the following ways:

- (1) the Facility has been subject to inactive construction for twelve (12) consecutive months;
- (2) the Facility has not generated electricity for twelve (12) consecutive months, unless there is proof of ongoing, active maintenance or repairs or replacement or rehabilitation work and written proof is provided that new parts have been ordered and will be received within six (6) months;
- (3) the Applicant ~~is~~ dissolved or the Facility is abandoned without the Facility first being transferred to a successor-in-interest or assignee; or
- (4) any part of an individual turbine or the Facility falls into disrepair, is in threat of collapsing, or present any other health or safety issue.

The land leases for the Facility are 30 years. After 30 years, the Facility will either be decommissioned or repowered with newer technology. This Plan reflects the full

decommissioning of the Facility, 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 Facility, the land use of the Facility site was primarily agricultural production. After the developed areas of the Facility are decommissioned, they will be returned to their predevelopment condition via grading and seeding. Please refer to Section 3.2 for a detailed description of reclamation activities.

3.0 Engineering Techniques

Decommissioning of the wind farm 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 wind turbines for scrap.
- Removal of turbine foundations to a depth of five feet (60 inches) below grade.
- Removal of other underground components (collection lines and junction box foundations) to a depth of five feet (60 inches) 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 landowners will be consulted to identify the extent and type of work to be completed. If a Landowner has agreed in writing, roads and culverts may remain. Underground utility lines and portions of foundations deeper than five feet below ground surface elevation will 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 Facility 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). 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, Federal, and local laws.

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 Facility access roads is a potential source for the public road restoration material. A pre-decommissioning road survey, similar to a pre-construction survey, will be prepared so that road conditions pre- and post-decommissioning can be accurately assessed. The Road District Commissioner and County Engineer must approve the use of public roads prior to decommissioning and reclamation activities.

3.1.2 Crane Path and Crane Pad Preparation and Removal

This cost estimate is based on the felling of all turbines, which eliminates the need for large industrial cranes and the associated crane paths and crane pads.

3.1.3 Wind Turbine Felling

This cost estimate assumes that the turbines will be brought to the ground using the technique of “felling.” Once on the ground, the turbines will be disassembled and processed for recycling. The felling technique has been used on numerous wind decommissioning projects and has several advantages over disassembly using large crawler cranes. Felling of a turbine eliminates the use of crane paths and crane pads that are otherwise necessary to disassemble the components of a turbine. In addition to avoiding costs associated with preparing crane paths and pads, this method will reduce the total disturbed area that needs to be reclaimed and restored during the decommissioning process. The elimination of the use of large cranes also reduces the number of trucks delivering and removing equipment and reduces the time required for decommissioning.

3.1.4 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 to licensed recycling facilities. If there are facilities for recycling of turbine blades offering cost effective recycling options within a reasonable distance of the Facility at the time the turbines are decommissioned, the blades will be transported to the facility for recycling. 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 Facility. As a result, this cost estimate assumes the blades and other components that cannot be recycled will be disposed of at a licensed landfill.

3.1.5 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 five feet deep is within the gravel ring around each turbine. The foundation will first be exposed using backhoes or other earth moving equipment. The topsoil removed from the foundation will be identified and stored separate from other excavated material for later replacement, as applicable. The pedestal (upper part of the turbine foundation) will then be removed to a depth of at least five 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. In the event of topsoil deficiency, topsoil that is consistent with the quality of that at the affected site will be imported. If subgrade fill is required, it shall be composed of clean subgrade material of similar quality to that of the immediate surrounding area. The topsoil and subsoil will be decompacted in accordance with the IDOA decompaction standards and tilled to an agricultural condition.

3.1.6 Access Roads

Unless otherwise requested by landowner, 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 at an off-site landfill. 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 and turbine 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 topsoil and subsoil will be decompacted in accordance with the IDOA decompaction standards and tilled to an agricultural condition.

3.1.7 Underground Electrical Collection Lines

The electrical cables and fiber optic conduits contain no material known to be harmful to the environment and will be left in place, non-functional. Any cables at a depth of less than five feet, such as cables entering and exiting the turbine foundations or junction boxes, 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 in accordance with the IDOA decompaction standards and tilled to an agricultural condition.

3.1.8 Substation and Switchyard

The Facility substation and switchyard are located in Morgan County. Therefore, the decommissioning of these components is not included in this Macoupin County cost estimate and Plan.

3.1.9 Operations and Maintenance Building

The O&M Building is assumed to be 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 to a depth of five feet. 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. The topsoil and subsoil will be decompacted in accordance with the IDOA decompaction standards and tilled to an agricultural condition.

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 using a ripper or subsoiling tool with a shank length of no less than 18 inches and a shank spacing of approximately the same measurement as the shank length, as summarized in the IDOA decompaction standards. All materials and debris associated with the Facility 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. Areas formerly used for agriculture shall be re-tilled to a farmable condition in accordance with IDOA AIMA guidelines.

An independent drainage engineer shall be present to ensure drainage tiles, waterways, culverts, etc. are repaired as work progresses.

3.3 Management of Potentially Hazardous Materials

The majority of demolition debris generated by decommissioning the Facility will be inert wastes, such as steel, concrete, and other solids. Minor amounts of hazardous materials, including oils and other fluids, may be located within the operational components of site equipment, such as nacelle-mounted turbine transformers (or padmounted transformers, in the case of the GE turbine models). Turbine transformers and other fluid-containing components will be drained prior to felling to prevent potential leaks. The equipment will be transported to licensed waste facilities to process the materials for disposal or recycling in accordance with Federal, State, and local hazardous waste regulations. Nevertheless, a hazardous material spill plan (such as a Spill Prevention, Control, and Countermeasure (SPCC) Plan) will be developed for the decommissioning and reclamation activities.

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. The Applicant shall provide a soil erosion control plan approved by the Macoupin County Soil and Water Conservation District or as approved by the County Engineer, or his/her designee. Because decommissioning will entail disturbance of more than one acre of soil, the Applicant will prepare a Stormwater Pollution Prevention Plan (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 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.

Project Phasing/Design BMP: Time periods during which disturbed soils are exposed should be minimized to the degree possible. Stabilization of soils will generally be accomplished immediately following decommissioning of the access roads, turbine sites, electrical cables, and the O&M facility. Where this is not possible, temporarily exposed soils will be temporarily stabilized with vegetation in accordance with the SWPPP for decommissioning.

Erosion Control Blankets and Seed BMP: Erosion control blanket (double-sided netting with wood fiber or weed-free straw fiber blanket) will be used as temporary stabilization for areas of slopes steeper than 4:1 and for areas of concentrated flow, such as ditches, swales, and similar areas around culverts. Additionally, seed will be applied in these areas

as necessary for temporary and/or permanent vegetative growth. The SWPPP developed for decommissioning will provide detailed specifications for erosion control blankets to be used under various slope and drainage conditions.

Ditch/Channel Protection: Where new channels are formed, as in the case of culverts removed from access roads and the removal of low water crossings, the resulting channel will be protected with erosion control blankets as described in the section above.

Surface Roughening: Surface roughening, or slope tracking, is the act of running a dozer or other heavy tracked equipment perpendicular to the grade of disturbed slopes. The tracks will provide a rough surface to decrease erosion potential during an interim period until a smooth grade, seed, and erosion control blanket can be applied.

Temporary Mulch Cover and Seed BMP: Temporary mulch cover (wood fiber to resist loss from grazing by wildlife or domestic animals) will be applied at a rate of two tons per acre to provide temporary erosion protection of exposed soils on slopes flatter than or equal to 3:1. Seed will be applied with the mulch for temporary and/or permanent vegetative growth as called for in the SWPPP. Mulch will be used for all soil types where slopes are flatter than 3:1 and no significant concentrated flows are present. The mulch will be disc-anchored to the soil to keep it from blowing away. The mulch also prohibits raindrop impact from dislodging soil and subsequently carrying the soil away during sheet drainage. If there is a challenge securing mulch to sandy soils, tackifier may be used to assist in disc anchoring.

Soil Stockpiles: Topsoil and subsoils present at the constructed Facility may need to be stripped, such as that soil located on top of trenched utilities or buried foundations, and shall be stockpiled separately on site during the decommissioning work. Stockpiles should also be located away from wetlands and surface waters. Perimeter controls, such as silt fence, will be installed around all stockpiles that are not placed within existing silt fences or other sediment control, where the potential exists for material to be eroded and transported to sensitive nature resources. Soils that are stockpiled for longer durations will be temporarily seeded and mulched or stabilized with a bonded fiber polymer emulsion.

Permanent Seed and Temporary Mulch and/or Erosion Control Blanket BMP: In areas at final grade that will not be used for agriculture, permanent seed will be applied to promote vegetative cover for permanent erosion control. Temporary mulch and/or erosion control blanket will be applied where appropriate to provide temporary erosion protection until the permanent seed is established.

4.2 Sediment Control

Removal of Ditch Crossing BMP: Temporary ditch crossings may be needed to accommodate the movements of cranes or other heavy equipment. Perimeter controls such as silt fence will be used at crossing locations to minimize runoff from exposed soils. Crossings will occur during dry conditions, if possible. If a stream is wet at the time of the crossing, alternative BMPs may be used, such as installing a temporary dam or using a bypass pump to create dry conditions at the proposed crossing location. Timber construction mats will be used as needed to prevent compaction and rutting at crossing locations. All temporary fills and construction mats will be removed immediately after the

crossing is successfully completed and the temporarily disturbed area is restored using the appropriate BMPs as described above.

Dewatering: A temporary sump and rock base will be used if a temporary pump is used to dewater an area of accumulated water. If a rock base cannot be used, the pump intake will be elevated to draw water from the top of the water column to avoid the intake and discharge of turbid water. Energy dissipation riprap will be applied to the discharge area of the pump hose. The water will be discharged to a large flat vegetated area for filtration/infiltration prior to draining into receiving waters of conveyances/ditches. If discharge water is unavoidably turbid, dewatering bags, temporary traps, rock weepers, or other adequate BMP will be used to control sediment discharge. All dewatering shall also comply with state water quality and discharge rules, including obtaining appropriate permits.

Silt Fence BMP or Fiber Logs: Silt fences or fiber logs will be used as perimeter controls downgradient of exposed soils during construction to capture suspended sediment particles on site, to the extent possible. The standard silt fence or fiber logs will also be used in smaller watershed areas where the contributing areas are typically less than 1/4 acre of drainage per 100 feet of standard silt fence or fiber logs. Standard silt fence or fiber logs will also be used for stockpiles eight feet high or higher which have slopes of 3:1 or steeper. Standard silt fence or fiber logs should not be used in areas of highly erodible soils which are found within streams, slopes, or banks of creeks and streams within the Facility's site.

Rock Entrance/Exit Tracking Control BMP: Rock construction entrances will be installed where access to a construction area from adjacent paved surfaces is needed.

Street Scraping/Sweeping BMP: Street scraping and sweeping will be used to retrieve sediment tracked or washed onto paved surfaces at the end of each working day, or as needed.

4.3 Controlling Stormwater Flowing Onto and Through the Project

Given the low gradient of the slopes in the Facility site, any stormwater flow that enters the Facility site should be minimal and controllable. Only newly disturbed areas may require new, temporary stormwater control.

Diversion Berms/Swales/Ditches: It may be necessary to direct diverted flow toward temporary settling basins via berms, swales, or ditches. If diversion controls are deemed necessary for decommissioning activities, these must be stabilized by temporary mulch and seeding, erosion control blankets, or by installing riprap to protect the channel from erosive forces.

Rock Check Dams: It may be necessary to install temporary check dams within swales or ditches that convey stormwater from areas disturbed by decommissioning activities. Rock check dams effectively control flow velocity and sediment, augmenting temporary stabilization of channels. Filter fabric can help filter the flow, minimize the scour of the soil under the rock, and facilitate removal of the check dams once permanent stabilization is achieved. The height of check dams should be at least two feet. Spacing depends upon slope. Downgradient rock checks should have a top elevation equal to the bottom elevation of the previous (upgradient) rock check.

Temporary Sedimentation Basins: Sedimentation basins serve to remove sediment from runoff from disturbed areas of the site. The basins detain runoff long enough to allow the majority of the sediment to settle out prior to discharge. The location and dimensions of temporary sedimentation basins, if any are necessary, will be verified in accordance with Illinois Environmental Protection Agency (IEPA) requirements at the time of decommissioning.

4.4 Permitting

All decommissioning and reclamation activities will comply with Federal, State, and local permit requirements. Decommissioning activities that will disturb more than one acre of soil will require coverage under the state-specific NPDES permit for construction activities. 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.

If necessary for decommissioning activities, wetlands and waters permits will be obtained from the US Army Corps of Engineers (USACE) or the IEPA. A SPCC Plan for decommissioning will likely also be required and will be prepared if necessary for decommissioning work.

Please see below for a table listing the potentially necessary permits for decommissioning the Facility.

POTENTIALLY NECESSARY PERMITS FOR DECOMMISSIONING		
ENTITY	Type of Permit	Description
US EPA/USACE	Wetland and water quality protection under Clean Water Act §§ 401 and 404	Section 401/404 permit or coverage under a nationwide permit if the decommissioning will impact wetlands or waters of the United States
ILLINOIS EPA	NPDES permit for construction activities, including Storm Water Pollution Prevention Plan (SWPPP)	Preparation and electronic submittal of SWPPP and Notice of Intent, as well as permit fee, to Illinois EPA for coverage under Illinois General Storm Water NPDES Permit for Construction Activities (ILR10).
ILL. DEPT. OF TRANSPORTATION (IDOT)	Size and weight limitations for vehicles on any Illinois roads.	Permits for over-size or over-weight vehicles.
IDOT	Permits required for driveway entrance.	Permits for work that may damage state roads or constructing/modifying entrances/exits to state roads.
IDOT	Permits required for road work	Permits for utility work in IDOT right-of-ways

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 site workers, including subcontractors, will be required to read, understand, and abide by the health and safety plan. A site safety office will be designated by the construction contractor to ensure compliance. This official

will have stop-work authority over all activities on the site should unsafe conditions or lapses in the safety plan be observed.

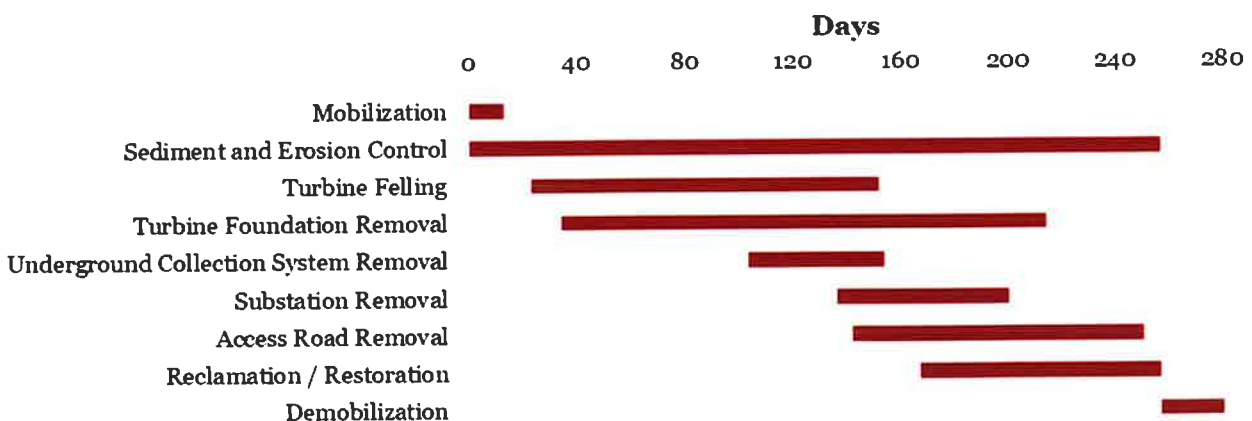
5.0 Timeline

Decommissioning of the Facility will be initiated if any of the following occurs:

- (1) the Facility has been subject to inactive construction for twelve (12) consecutive months;
- (2) the Facility has not generated electricity for twelve (12) consecutive months, unless there is proof of ongoing, active maintenance or repairs or replacement or rehabilitation work and written proof is provided that new parts have been ordered and will be received within six (6) months;
- (3) the Applicant Facility is dissolved or the Facility is abandoned without first being transferred to a successor-in-interest or assignee; or
- (4) any part of an individual turbine or the Facility falls into disrepair, is in threat of collapsing, or present any other health or safety issue.

It is anticipated that the decommissioning activities for the entire Facility (both in Morgan and Macoupin Counties) can be completed within the 12-month period allotted by the Counties. Due to the unpredictability of construction means and methods, status of disposal facilities, recycling options, and best engineering practices at the time the Facility will be decommissioned, a proposed schedule of a 40-week decommissioning efforts is provided below. This schedule represents an approximate timeline for all proposed turbine models and layouts. 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. Per Public Act 102-1123 and the AIMA, the decommissioning work shall be completed within eighteen (18) months of the end of the useful life of the Facility or from the occurrence of items (1), (2) or (3) above. The Applicant will immediately remedy, repair, restore or decommission, as appropriate, the occurrence of item (4) above.

Proposed Decommissioning Schedule



6.0 Decommissioning and Reclamation Costs

The cost estimates for decommissioning and reclamation of the Facility were prepared in current dollars, with the salvage value of equipment or materials calculated from 5-year average prices. The following information was used to develop the estimate:

- (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 estimates:

1. The estimates reflect current values for labor, materials, and equipment. The Plan and cost estimate will be revised by the end of the tenth (10th) year of the Commercial Operation Date of the WECS Project and then every five years thereafter for purposes of the Applicant posting new Financial Security with the County based on the revised cost estimate to complete the decommissioning activities. the initial 10 years of operation.
2. Due to the various design options still being considered, the most conservative turbine arrangement, representing the largest number of access roads and greatest linear feet of collection lines, has been used as the design basis for all five cost estimates for consistency.
3. Turbines will be assumed to have all applicable components recycled as scrap, with the exception of the blades. The estimate uses an average structural steel scrap price of \$312.42 per US ton based on prices posted on [scrapmonster.com](https://www.scrapmonster.com) in the last five years (2018-2023). The 5-year average prices used in the cost estimate were discounted by twenty-five percent (25%) to reflect the difficulty of realizing spot prices from local recyclers.
4. Electrical transformers, including turbine 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. For this estimate, we used a 5-year average price derived from [scrapmonster.com](https://www.scrapmonster.com) of \$0.38 per pound for used transformers. We assumed this average price is similar to the price offered by McCallister Power Systems located in Terre Haute, IN, which was identified as the regional transformer recycling location.
5. 5-year average prices for #2 insulated copper wire (50% recovery) are \$1.37 per pound, scrap electrical motors are \$0.29 per pound, and E.C. aluminum wire is \$1.00 per pound. The prices used in the cost estimate were discounted by twenty-five percent (25%) to reflect the difficulty of realizing spot prices from local recyclers.

The total estimated cost of the decommissioning of the Facility in Macoupin County, including decommissioning costs for all related and ancillary WECS Project infrastructure, for each potential turbine option is summarized in the table below:

Turbine Option	Cost of Decommissioning (\$ Per Turbine)	Salvage Value (\$ Per Turbine)	Net Costs (\$ Per Turbine)
45 Vestas V163 4.5-MW	\$7,59,688 (\$168,704)	\$4,958,835 (\$110,196)	\$2,505,853 (\$55,686)
45 Vestas V166 4.5-MW	\$7,622,935 (\$169,399)	\$5,059,372 (\$112,430)	\$2,436,563 (\$54,146)
34 Vestas V162 6.0-MW (119-meter HH)	\$6,855,272 (\$201,626)	\$4,185,470 (\$123,102)	\$2,571,402 (\$75,629)
34 Vestas V162 6.0-MW (105-meter HH)	\$6,848,830 (\$201,436)	\$4,168,784 (\$122,611)	\$2,581,646 (\$75,931)
26 GE 5.8-MW/ 15 GE 3.4-MW	\$7,029,886 (\$171,461)	\$3,793,356 (\$92,521)	\$3,119,930 (\$76,096)

7.0 Financial Assurance

The Macoupin County Updated WECS Ordinance requires the Applicant to post financial assurance for eligibility to begin construction. Specifically, Section X.A.6 of the Macoupin County Updated WECS Siting Ordinance requires a “draft form of Financial Security” be included as part of this Decommissioning and Site Reclamation Plan. This financial security must name Macoupin County as the beneficiary and must be issued in an amount the maximum allowable amount for each milestone per the tiered decommissioning security schedule as required by Section 21 (Deconstruction of Commercial Wind Energy Facilities and Financial Assurance) of the AIMA, and as mandated by Public Act 102-1123 (55 ILCS 5/5-12020(j)). “equal to the total cost of all decommissioning and restoration work.”

To comply with these requirements, enclosed as Attachment B is a Decommissioning Bond that has been reviewed and approved by the Philadelphia Indemnity Insurance Company. Pursuant to the bond, both the Applicant and Philadelphia Indemnity Company guarantee that all decommissioning and restoration activities required by this Plan, by the AIMA, and by the County’s Ordinance will occur.

This financial assurance can be used by the County if the Applicant fails to address a health and safety issue in a timely manner or fails to decommission the Facility according to this Plan. If financial assurance is used by the County because the Applicant fails to address a health and safety issue in a timely manner, the Applicant shall be obligated to post replacement financial assurance in amount that covers the estimated decommissioning costs as required by the AIMA and Public Act 102-1123 within ten (10) calendar days of a written request of the County. Also, as required by the Illinois Department of Agriculture through the AIMA, the Decommissioning Bond also names as secondary beneficiaries under the bond all participating landowners. The Applicant shall fill in the amount of the Decommissioning Bond once the County Board approves this Plan and a final decommissioning cost is agreed to. The County Board or its escrow agent must release the financial assurance if either of the following occurs: (1) the Project demonstrates and the County concurs that decommissioning has been satisfactorily completed, or (2) the Applicant (or its successors-in-interest or assigns) provides the County with replacement financial assurance that meets the requirements of this Plan, the Updated WECS Ordinance, the WECS Siting Permit Ordinance and the AIMA, provides the Project with written approval to implement this Plan. At the time the County Board or its escrow agent releases the financial assurance after completion of the decommissioning work, 10% shall be retained for one year to settle any outstanding dispute concerns or claims.

8.0 Additional Decommissioning Provisions

In accordance with sections X.A.7 through X.A .11 of the Macoupin County WECS Siting Ordinance, this Plan also includes the following provisions:

1. Pursuant to WECS Siting Ordinance X.A.7, the terms of this Plan are binding upon the Applicant and any of its successors in interest and assigns. The Applicant agrees that the terms of the Plan and compliance with the Plan will be incorporated into any and all transfers of ownership to the Facility.
2. Pursuant to WECS Siting Ordinance X.A.8, The Applicant's obligation to decommission the Facility is included in the lease agreement for every parcel included in the Siting Approval Permit application. This obligation is confirmed by the affidavit that is enclosed as Attachment C.
 3. Pursuant to WECS Siting Ordinance X.A.9, the Applicant agrees that the County has the legal right to transfer applicable Facility material to salvage firms in the event that the Applicant fails to perform decommissioning or abandons the Facility.
4. Pursuant to WECS Siting Ordinance X.A.10, the attached Decommissioning Bond includes procedures by which Macoupin County may access the Financial Assurance in the event that the Applicant fails to perform the required decommissioning.
5. Pursuant to WECS Siting Ordinance X.A.11, the Applicant agrees that Macoupin County shall have access to the site, pursuant to reasonable notice to affect or complete decommissioning. The Applicant further agrees that a portion of the Decommission Security will be held for one year past the decommissioning to settle any potential disputes.

Attachment A

Decommissioning and Site Restoration Cost Estimate

Decommissioning and Reclamation Const Estimate Summary

The following costs estimates were prepared for the components of the Lotus Wind Project located in Macoupin County. Multiple turbine models and configurations are still being considered at this time, but the final design will be selected from one of the following options:

- 45 Vestas V163 4.5-megawatt (MW) wind turbines (113-meter hub height)
- 45 Vestas V166 4.5-MW turbines (119-meter hub height)
- 34 Vestas V162 6.0-MW turbines (119-meter hub height)
- 34 Vestas V162 6.0-MW turbines (105-meter hub height)
- 41 GE model turbines comprising 26 GE 5.8-MW turbines (117-meter hub height) plus 15 GE 3.4-MW turbines (117-meter hub height)

Each of the five cost estimates is presented in the following tables. The turbine configuration represented by each estimate is shown at the top of the page. Due to the various design options still being considered, the most conservative turbine arrangement, representing the largest number of access roads and greatest linear feet of collection lines, was used as the design basis for all five cost estimates for consistency.

Lotus Wind Project – Macoupin County Decommissioning Cost Estimate
45 Vestas V163, 113-m hub height

Lotus Wind Project - Macoupin County Decommissioning Cost Estimate				
	Quantity	Unit	Unit Cost	Total Cost
Mobilization/Demobilization	1	Lump Sum	\$353,000.00	\$353,000
Engineering, Legal, Accounting, and Insurance Fees	1	Lump Sum	\$206,000.00	\$206,000
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	45	Each	\$2,883.20	\$129,744
Fell Turbine	45	Each	\$1,797.65	\$80,894
Process to Size and Load Turbine Components	16,446	Tons	\$78.67	\$1,293,856
Haul Turbine Components Offsite for Recycling (except blades)	16,446	Tons	\$11.80	\$194,038
Haul Turbine Components For Disposal (except blades)	3,260	Tons	\$16.58	\$54,050
Confirm Removal of All Turbine Residue	45	Each	\$2,056.19	\$92,529
Turbine Component Disposal (except blades)	3,260	Tons	\$81.00	\$264,032
Haul Fiberglass Blades For Disposal	1,451	Tons	\$93.75	\$136,057
Fiberglass Blades Disposal	1,451	Tons	\$81.00	\$117,554
Excavate Around Turbine Foundation	45	Each	\$290.31	\$13,064
Remove Turbine Foundation and Load	2,363	Cubic Yards	\$257.83	\$609,185
Backfill Excavation Area from Turbine Foundation Removal	45	Each	\$232.83	\$10,477
Haul Concrete (Turbine Foundation)	4,785	Tons	\$17.86	\$85,438
Disposal of Concrete from Turbine Foundation	2,363	Cubic Yards	\$0.00	\$0
Decompact Wind Turbine Generator Site	45	Each	\$182.03	\$8,191
Erosion and Sediment Control at Turbine Site	45	Each	\$1,253.50	\$56,407
Site Restoration: Decompact/Till to Farmable Condition	32	Acres	\$489.19	\$15,876
Subtotal Wind Turbine Generators				\$3,161,393
Met Towers				
Disconnect Tower Wiring	1	Each	\$2,883.20	\$2,883
Dismantle, Disassemble, and Load Tower Components	1	Each	\$5,096.00	\$5,096
Haul Tower Components Off Site	4	Tons	\$11.80	\$47
Excavate Around Tower Foundation	1	Each	\$64.69	\$65
Remove Tower Foundation and Load	1	Cubic Yards	\$257.83	\$298
Haul Concrete (Tower Foundation)	1	Cubic Yards	\$17.86	\$21
Disposal of Concrete from Met Tower	1	Cubic Yards	\$0.00	\$0
Grade Met Tower Site	1	Each	\$1,529.69	\$1,530
Erosion and Sediment Control at Met Tower Site	1	Each	\$399.00	\$399
Topsoil and Revegetation at Met Tower Site	0.1	Acre	\$6,050.00	\$347
Subtotal Met Towers				\$10,686
Electrical Collection/Transmission System				
Removal of Underground Collector System Cables Shallower than 5 ft	48	Locations	\$400.00	\$19,200
Haul Underground Collector System Cables	3	Tons	\$11.80	\$39
Disposal of Removed Cables (See Salvage Value)	1	Tons	\$0.00	\$0
Removal of Junction Box	3	Each	\$100.00	\$300
Erosion and Sediment Control at Junction Box Location	600	Feet	\$3.99	\$2,394
Topsoil and Revegetation at Junction Box Locations	0.03	Acres	\$6,050.00	\$167
Subtotal Electrical Collection/Transmission System				\$22,100
Access Roads			83,691	LP of Access Roads
Remove and Load Gravel Surfacing from Access Roads	33,063	Cubic Yards	\$2.69	\$88,973
Haul Gravel Removed from Access Roads	53,562	Tons	\$16.58	\$888,142
Disposal of Gravel Removed from Access Roads	53,562	Tons	\$0.00	\$0
Remove and Load Geotextile Fabric	185,980	Square Yards	\$0.88	\$164,553
Haul Geotextile Fabric	41	Tons	\$16.58	\$678
Dispose of Geotextile Fabric	41	Tons	\$81.00	\$3,314
Remove and Load Culvert from Beneath Access Roads	29	Each	\$448.00	\$12,992
Haul Culvert Removed from Access Roads	9	Tons	\$17.86	\$166
Disposal of Culverts	9	Tons	\$81.00	\$752
Remove Low Water Crossing from Access Roads	6	Each	\$3,400.00	\$20,400
Haul Low Water Crossing Materials Removed from Access Roads	6	Each	\$16.58	\$99
Disposal of Low Water Crossing Materials	6	Each	\$162.00	\$972
Decompact Access Road Corridor	83,691	Linear Feet	\$0.09	\$7,759
Erosion and Sediment Control Along Access Roads	62,768	Linear Feet	\$3.99	\$250,445
Site Restoration: Decompact/Till to Farmable Condition	46	Acres	\$489.19	\$22,557
Subtotal Access Roads				\$1,461,801

Lotus Wind Project – Macoupin County Decommissioning Cost Estimate
45 Vestas V163, 113-m hub height

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)	613	Ton	\$17.86	\$10,953
Crush Concrete	613	Ton	\$28.00	\$17,174
Disposal of Concrete from O&M Building Foundation	613	Ton	\$0.00	\$0
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	1,307	Cubic Yards	\$2.69	\$3,517
Haul Gravel Removed from O&M Site	1,307	Cubic Yards	\$16.58	\$21,669
Disposal of Gravel from O&M Site	1,307	Cubic Yards	\$0.00	\$0
Decompact O&M Building Site	1	Acre	\$252.39	\$252
Erosion and Sediment Control at O&M Building Site	626	Linear Feet	\$3.99	\$2,498
Till to Farmable Condition	1	Acre	\$489.19	\$489
Subtotal O&M Building				\$71,052
Public Roads Restoration	42	Miles	\$44,000.00	\$1,836,256
Total Demolition Costs				\$7,474,688
Crop Loss (90 Acres)	90	Acres	\$1,300.00	\$117,000
Crop loss value per acre estimated based on Schnitkey, G., C. Zulauf, N. Paulson and K. Swanson, "2022 Break-Even Prices for Corn and Soybeans," farmdoc daily (11):168, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, December 21, 2021. Value based on projected per acre for 2022, plus two years of 7% inflation and rounded up to the nearest \$100.				
Total Cost				\$7,591,688
Salvage/Recycle				
Turbine Towers (Structural Steel)	16446	Tons	\$234.32	\$3,853,592
Turbine Nacelles (Structural Steel)	3260	Tons	\$234.32	\$763,785
Turbine Generators	0	Pounds	\$0.15	\$0
Transformers (copper windings)	310464	Pounds	\$1.03	\$319,002
Transformers (oil)	30800	Gallons	\$0.70	\$21,560
Subtotal Salvage				\$4,958,835
Total Demolition Minus Salvage Value				\$2,505,853
Disposal Facility Notes:				
This estimate uses disposal facilities that are currently operational for the basis of this estimate. The estimate does not gurantee the facilities will be operational at the time of decommissioning. Disposal facilities identified for the purposes of this estiamte are listed below:				
Facility Name	Disposal Type	Distance (Mi)	Travel Time (Min)	
WM - Five Oaks Landfill and Hauling, 890 E 1500 North Rd, Taylorville, IL 62568	Landfill	35	42	
Jacksonville Iron, Inc., 739 E Lafayette Ave, Jacksonville, IL 62650	Recycling	22	27	
Springfield Concrete Recycling	Concrete Recycling	44	46	
McCallister Power Systems, 20 W Margaret Dr, Terre Haute, IN 47802	Transformer Recycling	151	180	

Lotus Wind Project – Macoupin County Decommissioning Cost Estimate
45 Vestas V166, 113-m hub height

Lotus Wind Project - Macoupin County Decommissioning Cost Estimate				
	Quantity	Unit	Unit Cost	Total Cost
Mobilization/Demobilization	1	Lump Sum	\$355,000.00	\$355,000
Engineering, Legal, Accounting, and Insurance Fees	1	Lump Sum	\$207,000.00	\$207,000
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	45	Each	\$2,883.20	\$129,744
Fell Turbine	45	Each	\$1,797.65	\$80,894
Process to Size and Load Turbine Components	17,049	Tons	\$78.67	\$1,341,310
Haul Turbine Components Offsite for Recycling (except blades)	17,049	Tons	\$11.80	\$201,155
Haul Turbine Components For Disposal (except blades)	2,942	Tons	\$16.58	\$48,786
Confirm Removal of All Turbine Residue	45	Each	\$2,056.19	\$92,529
Turbine Component Disposal (except blades)	2,942	Tons	\$81.00	\$238,317
Haul Fiberglass Blades For Disposal	1,478	Tons	\$93.75	\$138,554
Fiberglass Blades Disposal	1,478	Tons	\$81.00	\$119,712
Excavate Around Turbine Foundation	45	Each	\$290.31	\$13,064
Remove Turbine Foundation and Load	2,363	Cubic Yards	\$257.83	\$609,185
Backfill Excavation Area from Turbine Foundation Removal	45	Each	\$232.83	\$10,477
Haul Concrete (Turbine Foundation)	4,785	Tons	\$17.86	\$85,438
Disposal of Concrete from Turbine Foundation	2,363	Cubic Yards	\$0.00	\$0
Decompact Wind Turbine Generator Site	45	Each	\$182.03	\$8,191
Erosion and Sediment Control at Turbine Site	45	Each	\$1,253.50	\$56,407
Site Restoration: Decompact/Till to Farmable Condition	32	Acres	\$489.19	\$15,876
Subtotal Wind Turbine Generators				\$3,189,640
Met Towers				
Disconnect Tower Wiring	1	Each	\$2,883.20	\$2,883
Dismantle, Disassemble, and Load Tower Components	1	Each	\$5,096.00	\$5,096
Haul Tower Components Off Site	4	Tons	\$11.80	\$47
Excavate Around Tower Foundation	1	Each	\$64.69	\$65
Remove Tower Foundation and Load	1	Cubic Yards	\$257.83	\$298
Haul Concrete (Tower Foundation)	1	Cubic Yards	\$17.86	\$21
Disposal of Concrete from Met Tower	1	Cubic Yards	\$0.00	\$0
Grade Met Tower Site	1	Each	\$1,529.69	\$1,530
Erosion and Sediment Control at Met Tower Site	1	Each	\$399.00	\$399
Topsoil and Revegetation at Met Tower Site	0.1	Acre	\$6,050.00	\$347
Subtotal Met Towers				\$10,686
Electrical Collection/Transmission System				
Removal of Underground Collector System Cables Shallower than 5 ft	48	Locations	\$400.00	\$19,200
Haul Underground Collector System Cables	3	Tons	\$11.80	\$39
Disposal of Removed Cables (See Salvage Value)	1	Tons	\$0.00	\$0
Removal of Junction Box	3	Each	\$100.00	\$300
Erosion and Sediment Control at Junction Box Location	600	Feet	\$3.99	\$2,394
Topsoil and Revegetation at Junction Box Locations	0.03	Acres	\$6,050.00	\$167
Subtotal Electrical Collection/Transmission System				\$22,100
Access Roads				
Remove and Load Gravel Surfacing from Access Roads	33,063	Cubic Yards	\$2.69	\$88,973
Haul Gravel Removed from Access Roads	53,562	Tons	\$16.58	\$888,142
Disposal of Gravel Removed from Access Roads	53,562	Tons	\$0.00	\$0
Remove and Load Geotextile Fabric	185,980	Square Yards	\$0.88	\$164,553
Haul Geotextile Fabric	41	Tons	\$16.58	\$678
Dispose of Geotextile Fabric	41	Tons	\$81.00	\$3,314
Remove and Load Culvert from Beneath Access Roads	29	Each	\$448.00	\$12,992
Haul Culvert Removed from Access Roads	9	Tons	\$17.86	\$166
Disposal of Culverts	9	Tons	\$81.00	\$752
Remove Low Water Crossing from Access Roads	6	Each	\$3,400.00	\$20,400
Haul Low Water Crossing Materials Removed from Access Roads	6	Each	\$16.58	\$99
Disposal of Low Water Crossing Materials	6	Each	\$162.00	\$972
Decompact Access Road Corridor	83,691	Linear Feet	\$0.09	\$7,759
Erosion and Sediment Control Along Access Roads	62,768	Linear Feet	\$3.99	\$250,445
Site Restoration: Decompact/Till to Farmable Condition	46	Acres	\$489.19	\$22,557
Subtotal Access Roads				\$1,461,801

Lotus Wind Project – Macoupin County Decommissioning Cost Estimate
45 Vestas V166, 113-m hub height

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)	613	Ton	\$17.86	\$10,953
Crush Concrete	613	Ton	\$28.00	\$17,174
Disposal of Concrete from O&M Building Foundation	613	Ton	\$0.00	\$0
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	1,307	Cubic Yards	\$2.69	\$3,517
Haul Gravel Removed from O&M Site	1,307	Cubic Yards	\$16.58	\$21,669
Disposal of Gravel from O&M Site	1,307	Cubic Yards	\$0.00	\$0
Decompact O&M Building Site	1	Acre	\$252.39	\$252
Erosion and Sediment Control at O&M Building Site	626	Linear Feet	\$3.99	\$2,498
Till to Farmable Condition	1	Acre	\$489.19	\$489
Subtotal O&M Building				\$71,052
Public Roads Restoration	42	Miles	\$44,000.00	\$1,836,256
Total Demolition Costs				\$7,505,935
Crop Loss (90 Acres)	90	Acres	\$1,300.00	\$117,000
<i>Crop loss value per acre estimated based on Schnitkey, G., C. Zulauf, N. Paulson and K. Swanson, "2022 Break-Even Prices for Corn and Soybeans," formdoc daily (11):168, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, December 21, 2021. Value based on projected per acre for 2022, plus two years of 7% inflation and rounded up to the nearest \$100,</i>				
Total Cost				\$7,622,935
Salvage/Recycle				
Turbine Towers (Structural Steel)	16446	Tons	\$234.32	\$3,853,592
Turbine Nacelles (Structural Steel)	2942	Tons	\$234.32	\$689,398
Turbine Generators	1206369	Pounds	\$0.15	\$174,924
Transformers (copper windings)	310464	Pounds	\$1.03	\$319,002
Transformers (oil)	30800	Gallons	\$0.70	\$21,560
Subtotal Salvage				\$5,059,372
Total Demolition Minus Salvage Value				\$2,436,563
Disposal Facility Notes:				
This estimate uses disposal facilities that are currently operational for the basis of this estimate. The estimate does not gurarantee the facilities will be operational at the time of decommissioning. Disposal facilities identified for the purposes of this estiamte are listed below:				
Facility Name	Disposal Type	Distance (Mi)	Travel Time (Min)	
WM - Five Oaks Landfill and Hauling, 890 E 1500 North Rd, Taylorville, IL 62568	Landfill	35	42	
Jacksonville Iron, Inc., 739 E Lafayette Ave, Jacksonville, IL 62650	Recycling	22	27	
Springfield Concrete Recycling	Concrete Recycling	44	46	
McCallister Power Systems, 20 W Margaret Dr, Terre Haute, IN 47802	Transformer Recycling	151	180	

Lotus Wind Project – Macoupin County Decommissioning Cost Estimate
34 Vestas V162, 119-m hub height

Lotus Wind Project - Macoupin County Decommissioning Cost Estimate				
	Quantity	Unit	Unit Cost	Total Cost
Mobilization/Demobilization	1	Lump Sum	\$308,000.00	\$308,000
Engineering, Legal, Accounting, and Insurance Fees	1	Lump Sum	\$187,000.00	\$187,000
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	34	Each	\$2,883.20	\$98,029
Fell Turbine	34	Each	\$1,797.65	\$61,120
Process to Size and Load Turbine Components	13,113	Tons	\$78.67	\$1,031,605
Haul Turbine Components Offsite for Recycling (except blades)	13,113	Tons	\$11.80	\$154,709
Haul Turbine Components For Disposal (except blades)	3,293	Tons	\$16.58	\$54,596
Confirm Removal of All Turbine Residue	34	Each	\$2,056.19	\$69,910
Turbine Component Disposal (except blades)	3,293	Tons	\$81.00	\$266,699
Haul Fiberglass Blades For Disposal	1,041	Tons	\$93.75	\$97,586
Fiberglass Blades Disposal	1,041	Tons	\$81.00	\$84,315
Excavate Around Turbine Foundation	34	Each	\$290.31	\$9,870
Remove Turbine Foundation and Load	1,785	Cubic Yards	\$257.83	\$460,273
Backfill Excavation Area from Turbine Foundation Removal	34	Each	\$232.83	\$7,916
Haul Concrete (Turbine Foundation)	3,615	Tons	\$17.86	\$64,553
Disposal of Concrete from Turbine Foundation	1,785	Cubic Yards	\$0.00	\$0
Decompact Wind Turbine Generator Site	34	Each	\$182.03	\$6,189
Erosion and Sediment Control at Turbine Site	34	Each	\$1,253.50	\$42,619
Site Restoration: Decompect/Till to Farmable Condition	25	Acres	\$489.19	\$11,996
Subtotal Wind Turbine Generators				\$2,521,986
Met Towers				
Disconnect Tower Wiring	1	Each	\$2,883.20	\$2,883
Dismantle, Disassemble, and Load Tower Components	1	Each	\$5,096.00	\$5,096
Haul Tower Components Off Site	4	Tons	\$11.80	\$47
Excavate Around Tower Foundation	1	Each	\$64.69	\$65
Remove Tower Foundation and Load	1	Cubic Yards	\$257.83	\$298
Haul Concrete (Tower Foundation)	1	Cubic Yards	\$17.86	\$21
Disposal of Concrete from Met Tower	1	Cubic Yards	\$0.00	\$0
Grade Met Tower Site	1	Each	\$1,529.69	\$1,530
Erosion and Sediment Control at Met Tower Site	1	Each	\$399.00	\$399
Topsoil and Revegetation at Met Tower Site	0.1	Acre	\$6,050.00	\$347
Subtotal Met Towers				\$10,686
Electrical Collection/Transmission System				
Removal of Underground Collector System Cables Shallower than 5 ft	37	Locations	\$400.00	\$14,800
Haul Underground Collector System Cables	3	Tons	\$11.80	\$30
Disposal of Removed Cables (See Salvage Value)	1	Tons	\$0.00	\$0
Removal of Junction Box	3	Each	\$100.00	\$300
Erosion and Sediment Control at Junction Box Location	600	Feet	\$3.99	\$2,394
Topsoil and Revegetation at Junction Box Locations	0.03	Acres	\$6,050.00	\$167
Subtotal Electrical Collection/Transmission System				\$17,691
Access Roads			\$389.75 LF of Access Roads	
Remove and Load Gravel Surfacing from Access Roads	33,063	Cubic Yards	\$2.69	\$88,973
Haul Gravel Removed from Access Roads	53,562	Tons	\$16.58	\$888,142
Disposal of Gravel Removed from Access Roads	53,562	Tons	\$0.00	\$0
Remove and Load Geotextile Fabric	185,980	Square Yards	\$0.88	\$164,553
Haul Geotextile Fabric	41	Tons	\$16.58	\$678
Dispose of Geotextile Fabric	41	Tons	\$81.00	\$3,314
Remove and Load Culvert from Beneath Access Roads	29	Each	\$448.00	\$12,992
Haul Culvert Removed from Access Roads	9	Tons	\$17.86	\$166
Disposal of Culverts	9	Tons	\$81.00	\$752
Remove Low Water Crossing from Access Roads	6	Each	\$3,400.00	\$20,400
Haul Low Water Crossing Materials Removed from Access Roads	6	Each	\$16.58	\$99
Disposal of Low Water Crossing Materials	6	Each	\$162.00	\$972
Decompact Access Road Corridor	83,691	Linear Feet	\$0.09	\$7,759
Erosion and Sediment Control Along Access Roads	62,768	Linear Feet	\$3.99	\$250,445
Site Restoration: Decompect/Till to Farmable Condition	46	Acres	\$489.19	\$22,557
Subtotal Access Roads				\$1,461,801

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)	613	Ton	\$17.86	\$10,953
Crush Concrete	613	Ton	\$28.00	\$17,174
Disposal of Concrete from O&M Building Foundation	613	Ton	\$0.00	\$0
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	1,307	Cubic Yards	\$2.69	\$3,517
Haul Gravel Removed from O&M Site	1,307	Cubic Yards	\$16.58	\$21,669
Disposal of Gravel from O&M Site	1,307	Cubic Yards	\$0.00	\$0
Decompact O&M Building Site	1	Acre	\$252.39	\$252
Erosion and Sediment Control at O&M Building Site	626	Linear Feet	\$3.99	\$2,498
Till to Farmable Condition	1	Acre	\$489.19	\$489
Subtotal O&M Building				\$71,052
Public Roads Restoration	42	Miles	\$44,000.00	\$1,836,255
Total Demolition Costs				\$6,766,872
Crop Loss (68 Acres)	68	Acres	\$1,300.00	\$88,400
Crop loss value per acre estimated based on Schnitkey, G., C. Zulauf, N. Paulson and K. Swanson, "2022 Break-Even Prices for Corn and Soybeans," farmdoc daily (11):168, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, December 21, 2021. Value based on projected per acre for 2022, plus two years of 7% inflation and rounded up to the nearest \$100.				
Total Cost				\$6,855,272
Salvage/Recycle				
Turbine Towers (Structural Steel)	13113	Tons	\$234.32	\$3,072,510
Turbine Nacelles (Structural Steel)	3293	Tons	\$234.32	\$771,502
Turbine Generators	0	Pounds	\$0.15	\$0
Transformers (copper windings)	310464	Pounds	\$1.03	\$319,002
Transformers (oil)	30800	Gallons	\$0.70	\$21,560
Subtotal Salvage				\$4,185,470
Total Demolition Minus Salvage Value				\$2,571,402
Disposal Facility Notes:				
This estimate uses disposal facilities that are currently operational for the basis of this estimate. The estimate does not gurantee the facilities will be operational at the time of decommissioning. Disposal facilities identified for the purposes of this estiamte are listed below:				
Facility Name	Disposal Type	Distance (Mi)	Travel Time (Min)	
WM - Five Oaks Landfill and Hauling, 890 E 1500 North Rd, Taylorville, IL 62568	Landfill	35	22	
Jacksonville Iron, Inc., 739 E Lafayette Ave, Jacksonville, IL 62650	Recycling	22	47	
Springfield Concrete Recycling	Concrete Recycling	44	46	
McCallister Power Systems, 20 W Margaret Dr, Terre Haute, IN 47802	Transformer Recycling	151	18	0

Lotus Wind Project – Macoupin County Decommissioning Cost Estimate
34 Vestas V162, 105-m hub height

Lotus Wind Project - Macoupin County Decommissioning Cost Estimate				
	Quantity	Unit	Unit Cost	Total Cost
Mobilization/Demobilization	1	Lump Sum	\$308,000.00	\$308,000
Engineering, Legal, Accounting, and Insurance Fees	1	Lump Sum	\$187,000.00	\$187,000
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	34	Each	\$2,883.20	\$98,029
Fell Turbine	34	Each	\$1,797.65	\$61,120
Process to Size and Load Turbine Components	13,042	Tons	\$78.67	\$1,026,003
Haul Turbine Components Offsite for Recycling (except blades)	13,042	Tons	\$11.80	\$153,869
Haul Turbine Components For Disposal (except blades)	3,293	Tons	\$16.58	\$54,596
Confirm Removal of All Turbine Residue	34	Each	\$2,056.19	\$69,910
Turbine Component Disposal (except blades)	3,293	Tons	\$81.00	\$266,699
Haul Fiberglass Blades For Disposal	1,041	Tons	\$93.75	\$97,586
Fiberglass Blades Disposal	1,041	Tons	\$81.00	\$84,315
Excavate Around Turbine Foundation	34	Each	\$290.31	\$9,870
Remove Turbine Foundation and Load	1,785	Cubic Yards	\$257.83	\$460,273
Backfill Excavation Area from Turbine Foundation Removal	34	Each	\$232.83	\$7,916
Haul Concrete (Turbine Foundation)	3,615	Tons	\$17.86	\$64,553
Disposal of Concrete from Turbine Foundation	1,785	Cubic Yards	\$0.00	\$0
Decompact Wind Turbine Generator Site	34	Each	\$182.03	\$6,189
Erosion and Sediment Control at Turbine Site	34	Each	\$1,253.50	\$42,619
Site Restoration: Decompact/Till to Farmable Condition	25	Acres	\$489.19	\$11,996
Subtotal Wind Turbine Generators				\$2,515,544
LiDAR Tower				
Disconnect Tower Wiring	1	Each	\$2,883.20	\$2,883
Dismantle, Disassemble, and Load Tower Components	1	Each	\$5,096.00	\$5,096
Haul Tower Components Off Site	4	Tons	\$11.80	\$47
Excavate Around Tower Foundation	1	Each	\$64.69	\$65
Remove Tower Foundation and Load	1	Cubic Yards	\$257.83	\$298
Haul Concrete (Tower Foundation)	1	Cubic Yards	\$17.86	\$21
Disposal of Concrete from Met Tower	1	Cubic Yards	\$0.00	\$0
Grade Met Tower Site	1	Each	\$1,529.69	\$1,530
Erosion and Sediment Control at Met Tower Site	1	Each	\$399.00	\$399
Topsoil and Revegetation at Met Tower Site	0.1	Acre	\$6,050.00	\$347
Subtotal Met Towers				\$10,686
Electrical Collection/Transmission System				
Removal of Underground Collector System Cables Shallower than 5 ft	37	Locations	\$400.00	\$14,800
Haul Underground Collector System Cables	3	Tons	\$11.80	\$30
Disposal of Removed Cables (See Salvage Value)	1	Tons	\$0.00	\$0
Removal of Junction Box	3	Each	\$100.00	\$300
Erosion and Sediment Control at Junction Box Location	600	Feet	\$3.99	\$2,394
Topsoil and Revegetation at Junction Box Locations	0.03	Acres	\$6,050.00	\$167
Subtotal Electrical Collection/Transmission System				\$17,691
Access Roads			LF of Access Roads	
Remove and Load Gravel Surfacing from Access Roads	33,063	Cubic Yards	\$2.69	\$88,973
Haul Gravel Removed from Access Roads	53,562	Tons	\$16.58	\$888,142
Disposal of Gravel Removed from Access Roads	53,562	Tons	\$0.00	\$0
Remove and Load Geotextile Fabric	185,980	Square Yards	\$0.88	\$164,553
Haul Geotextile Fabric	41	Tons	\$16.58	\$678
Dispose of Geotextile Fabric	41	Tons	\$81.00	\$3,314
Remove and Load Culvert from Beneath Access Roads	29	Each	\$448.00	\$12,992
Haul Culvert Removed from Access Roads	9	Tons	\$17.86	\$166
Disposal of Culverts	9	Tons	\$81.00	\$752
Remove Low Water Crossing from Access Roads	6	Each	\$3,400.00	\$20,400
Haul Low Water Crossing Materials Removed from Access Roads	6	Each	\$16.58	\$99
Disposal of Low Water Crossing Materials	6	Each	\$162.00	\$972
Decompact Access Road Corridor	83,691	Linear Feet	\$0.09	\$7,759
Erosion and Sediment Control Along Access Roads	62,768	Linear Feet	\$3.99	\$250,445
Site Restoration: Decompact/Till to Farmable Condition	46	Acres	\$489.19	\$22,557
Subtotal Access Roads				\$1,461,801

Lotus Wind Project – Macoupin County Decommissioning Cost Estimate
34 Vestas V162, 105-m hub height

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)	613	Ton	\$17.86	\$10,953
Crush Concrete	613	Ton	\$28.00	\$17,174
Disposal of Concrete from O&M Building Foundation	613	Ton	\$0.00	\$0
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	1,307	Cubic Yards	\$2.69	\$3,517
Haul Gravel Removed from O&M Site	1,307	Cubic Yards	\$16.58	\$21,669
Disposal of Gravel from O&M Site	1,307	Cubic Yards	\$0.00	\$0
Decompact O&M Building Site	1	Acre	\$252.39	\$252
Erosion and Sediment Control at O&M Building Site	626	Linear Feet	\$3.99	\$2,498
Till to Farmable Condition	1	Acre	\$489.19	\$489
Subtotal O&M Building				\$71,052
Public Roads Restoration	42	Miles	\$44,000.00	\$1,836,256
Total Demolition Costs				\$6,760,430
Crop Loss (68 Acres)	68	Acres	\$1,300.00	\$88,400
<i>Crop loss value per acre estimated based on Schnitkey, G.; C. Zulauf, N. Paulson and K. Swanson. "2022 Break-Even Prices for Corn and Soybeans," farmdoc daily (11):168, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, December 21, 2021. Value based on projected price per acre for 2022, plus two years of 7% inflation and rounded up to the nearest \$100.</i>				
Total Cost				\$6,848,830
Salvage/Recycle				
Turbine Towers (Structural Steel)	13042	Tons	\$234.32	\$3,055,825
Turbine Nacelles (Structural Steel)	3293	Tons	\$234.32	\$771,502
Turbine Generators	0	Pounds	\$0.15	\$0
Transformers (copper windings)	310464	Pounds	\$1.03	\$319,002
Transformers (oil)	30800	Gallons	\$0.70	\$21,560
Subtotal Salvage				\$4,168,784
Total Demolition Minus Salvage Value				\$2,581,646
Disposal Facility Notes:				
This estimate uses disposal facilities that are currently operational for the basis of this estimate. The estimate does not guarantee the facilities will be operational at the time of decommissioning. Disposal facilities identified for the purposes of this estimate are listed below:				
Facility Name	Disposal Type	Distance (Mi)	Travel Time (Min)	
WM - Five Oaks Landfill and Hauling, 890 E 1500 North Rd, Taylorville, IL 62568	Landfill	35	42	
Jacksonville Iron, Inc., 739 E Lafayette Ave, Jacksonville, IL 62650	Recycling	22	27	
Springfield Concrete Recycling	Concrete Recycling	44	46	
McCallister Power Systems, 20 W Margaret Dr, Terre Haute, IN 47802	Transformer Recycling	151	18	0

Lotus Wind Project – Macoupin County Decommissioning Cost Estimate
26 GE 5.8-MW, 117-m hub height and 15 GE 3.4-MW 117-m hub height

Lotus Wind Project - Macoupin County Decommissioning Cost Estimate				
	Quantity	Unit	Unit Cost	Total Cost
Mobilization/Demobilization	1	Lump Sum	\$318,000.00	\$318,000
Engineering, Legal, Accounting, and Insurance Fees	1	Lump Sum	\$191,000.00	\$191,000
Permitting				
County/Municipal Permits	1	Lump Sum	\$10,000.00	\$10,000
State Permits (SWPPP, SPC)	1	Lump Sum	\$25,000.00	\$25,000
Subtotal Permits				\$35,000
Wind Turbine Generators				
Disconnect Turbine Wiring	41	Each	\$2,883.20	\$118,211
Fell Turbine	41	Each	\$1,797.65	\$73,703
Process to Size and Load Turbine Components	13,671	Tons	\$78.67	\$1,075,501
Haul Turbine Components Offsite for Recycling (except blades)	13,671	Tons	\$11.80	\$161,292
Haul Turbine Components For Disposal (except blades)	1,779	Tons	\$16.58	\$29,492
Confirm Removal of All Turbine Residue	41	Each	\$2,056.19	\$84,304
Turbine Component Disposal (except blades)	1,779	Tons	\$81.00	\$144,065
Haul Fiberglass Blades For Disposal	1,244	Tons	\$93.75	\$116,588
Fiberglass Blades Disposal	1,244	Tons	\$81.00	\$100,733
Excavate Around Turbine Foundation	41	Each	\$290.31	\$11,903
Remove Turbine Foundation and Load	2,153	Cubic Yards	\$257.83	\$555,035
Backfill Excavation Area from Turbine Foundation Removal	41	Each	\$232.83	\$9,546
Haul Concrete (Turbine Foundation)	4,359	Tons	\$17.86	\$77,843
Disposal of Concrete from Turbine Foundation	2,153	Cubic Yards	\$0.00	\$0
Remove and Load Transformer	15	Each	\$553.61	\$8,304
Freight Transformer to Recycler	15	Each	\$504.89	\$7,573
Remove Transformer Pad	77	Cubic Yards	\$171.84	\$13,167
Transformer Disposal (Salvage Value)	15	Each	\$0.00	\$0
Haul Concrete (Transformer Pad)	57	Tons	\$17.86	\$1,014
Disposal of Concrete from Transformer Pad	57	Tons	\$0.00	\$0
Decompact Wind Turbine Generator Site	41	Each	\$182.03	\$7,463
Erosion and Sediment Control at Turbine Site	41	Each	\$1,253.50	\$51,393
Site Restoration: Decompact/Till to Farmable Condition	30	Acres	\$489.19	\$14,465
Subtotal Wind Turbine Generators				\$2,661,594
LIDAR Tower				
Disconnect Tower Wiring	1	Each	\$2,883.20	\$2,883
Dismantle, Disassemble, and Load Tower Components	1	Each	\$5,096.00	\$5,096
Haul Tower Components Off Site	4	Tons	\$11.80	\$47
Excavate Around Tower Foundation	1	Each	\$64.69	\$65
Remove Tower Foundation and Load	1	Cubic Yards	\$257.83	\$298
Haul Concrete (Tower Foundation)	1	Cubic Yards	\$17.86	\$21
Disposal of Concrete from Met Tower	1	Cubic Yards	\$0.00	\$0
Grade Met Tower Site	1	Each	\$1,529.69	\$1,530
Erosion and Sediment Control at Met Tower Site	1	Each	\$399.00	\$399
Topsoil and Revegetation at Met Tower Site	0.1	Acre	\$6,050.00	\$347
Subtotal Met Towers				\$10,686
Electrical Collection/Transmission System				
Removal of Underground Collector System Cables Shallower than 5 ft	44	Locations	\$400.00	\$17,600
Haul Underground Collector System Cables	3	Tons	\$11.80	\$36
Disposal of Removed Cables (See Salvage Value)	1	Tons	\$0.00	\$0
Removal of Junction Box	3	Each	\$100.00	\$300
Erosion and Sediment Control at Junction Box Location	600	Feet	\$3.99	\$2,394
Topsoil and Revegetation at Junction Box Locations	0.03	Acres	\$6,050.00	\$167
Subtotal Electrical Collection/Transmission System				\$20,496
Access Roads			LF of Access Roads	
Remove and Load Gravel Surfacing from Access Roads	33,063	Cubic Yards	\$2.69	\$88,973
Haul Gravel Removed from Access Roads	53,562	Tons	\$16.58	\$888,142
Disposal of Gravel Removed from Access Roads	53,562	Tons	\$0.00	\$0
Remove and Load Geotextile Fabric	185,980	Square Yards	\$0.88	\$164,553
Haul Geotextile Fabric	41	Tons	\$16.58	\$678
Dispose of Geotextile Fabric	41	Tons	\$81.00	\$3,314
Remove and Load Culvert from Beneath Access Roads	29	Each	\$448.00	\$12,992
Haul Culvert Removed from Access Roads	9	Tons	\$17.86	\$166
Disposal of Culverts	9	Tons	\$81.00	\$752
Remove Low Water Crossing from Access Roads	6	Each	\$3,400.00	\$20,400
Haul Low Water Crossing Materials Removed from Access Roads	6	Each	\$16.58	\$99
Disposal of Low Water Crossing Materials	6	Each	\$162.00	\$972
Decompact Access Road Corridor	83,691	Linear Feet	\$0.09	\$7,759
Erosion and Sediment Control Along Access Roads	62,768	Linear Feet	\$3.99	\$250,445
Site Restoration: Decompact/Till to Farmable Condition	46	Acres	\$489.19	\$22,557
Subtotal Access Roads				\$1,461,801

Lotus Wind Project – Macoupin County Decommissioning Cost Estimate
26 GE 5.8-MW, 117-m hub height and 15 GE 3.4-MW 117-m hub height

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)	613	Ton	\$17.86	\$10,953
Crush Concrete	613	Ton	\$28.00	\$17,174
Disposal of Concrete from O&M Building Foundation	613	Ton	\$0.00	\$0
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	1,307	Cubic Yards	\$2.69	\$3,517
Haul Gravel Removed from O&M Site	1,307	Cubic Yards	\$16.58	\$21,669
Disposal of Gravel from O&M Site	1,307	Cubic Yards	\$0.00	\$0
Decompact O&M Building Site	1	Acre	\$252.39	\$252
Erosion and Sediment Control at O&M Building Site	626	Linear Feet	\$3.99	\$2,498
Till to Farmable Condition	1	Acre	\$489.19	\$489
Subtotal O&M Building				\$71,052
Public Roads Restoration	42	Miles	\$44,000.00	\$1,836,256
Total Demolition Costs				\$6,923,286
Crop Loss (82 Acres)	82	Acres	\$1,300.00	\$106,600
Crop loss value per acre estimated based on Schnitkey, G., C. Zulauf, N. Paulson and K. Swanson, daily (11):168, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, December 21, 2021. Value per acre for 2022, plus two years of 7% inflation and rounded up to the nearest \$100.		"2022 Break-Even Prices for Corn and Soybeans." farmdoc based on projected		
Total Cost				\$7,029,886
Salvage/Recycle				
Turbine Towers (Structural Steel)	12709	Tons	\$234.32	\$2,977,836
Turbine Nacelles (Structural Steel)	1389	Tons	\$234.32	\$325,507
Turbine Generators	1024524	Pounds	\$0.15	\$148,556
Transformers (copper windings)	310464	Pounds	\$1.03	\$319,002
Transformers (oil)	30800	Gallons	\$0.70	\$21,560
Subtotal Salvage				\$3,793,356
Total Demolition Minus Salvage Value				\$3,119,930
Disposal Facility Notes:				
This estimate uses disposal facilities that are currently operational for the basis of this estimate. The estimate does not guarantee the facilities will be operational at the time of decommissioning. Disposal facilities identified for the purposes of this estimate are listed below:				
Facility Name	Disposal Type	Distance (Mi)	Travel Time (Min)	
WM - Five Oaks Landfill and Hauling, 890 E 1500 North Rd, Taylorville, IL 62568	Landfill	35	42	
Jacksonville Iron, Inc., 739 E Lafayette Ave, Jacksonville, IL 62650	Recycling	22	27	
Springfield Concrete Recycling	Concrete Recycling	44	46	
McCallister Power Systems, 20 W Margaret Dr, Terre Haute, IN 47802	Transformer Recycling	151	180	

Attachment B

Draft Decommissioning Bond

DECOMMISSIONING BOND
(Performance and Payment Bond)
BOND NUMBER _____

KNOW ALL MEN BY THESE PRESENTS, that Lotus Wind LLC, as Principal, and Philadelphia Indemnity Insurance Company, a Pennsylvania Corporation duly organized under the laws of the State of Illinois, as Surety, are held and firmly bound unto Macoupin County, Illinois, as Obligee (or “Primary Obligee”), in the sum of _____ (\$ _____) Dollars of lawful money of the United States, for payment of which, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents, the liability of the Surety being limited to the penal sum of this bond regardless of the number of years this Bond is in effect.

WHEREAS, the Obligee adopted Macoupin County Board Ordinance No. 0-2021.02, “Wind Energy Conversion Systems Siting Ordinance” on April 14, 2021 (“WECS Siting Ordinance”), which sets forth the terms and conditions that govern the siting approval process, development, construction, operation, maintenance and decommissioning of wind energy conversion systems (“WECS”) in Macoupin County, Illinois; and

WHEREAS, the Obligee approved the construction and operation of a WECS on, under, or within privately-owned land and publicly-owned land in Macoupin County, Illinois with all required above and below ground infrastructure and other improvements (i.e., access roads, underground collection lines, a switchyard, a substation and an operation and maintenance building), which is known as the “Lotus Wind Project” pursuant to the Macoupin County WECS Siting Ordinance; and

WHEREAS, as part of its approval of the Project, the Obligee also approved the following documents that govern aspects of the siting development, construction, operation, maintenance and decommissioning of the Project: the Agricultural Impact Mitigation Agreement dated _____ (“AIMA”), the Decommissioning Plan dated _____ and the Road Use Agreement dated _____; and

WHEREAS, the WECS Siting Ordinance, the AIMA, and the Decommissioning Plan are each specifically referred to, incorporated by reference herein and made part of this Decommissioning Bond. The Road Use Agreement dated _____ is specifically excluded from this Bond as the Principal is posting a different, separate security with the Obligee to ensure the performance of its obligations set forth in the Road Use Agreement, and

WHEREAS, the Principal has arranged for the Surety to issue this Bond and has posted this Bond with the Obligee for the purpose of ensuring: (1) the performance and completion of all required decommissioning work and repair and restoration work related to decommissioning of the Project, including but not limited to, such decommissioning work and repair and restoration

work as required by the WECS Siting Ordinance, the AIMA and the Decommissioning Plan (“Project Decommission and Restoration Work”); (2) the performance and completion of all required repair and restoration work related to the construction, maintenance and operation of the Project as required by the AIMA, the Decommissioning Plan and the WECS Siting Ordinance (“Project Restoration Work”); and (3) the payment of all contractors and subcontractors and material suppliers who furnish materials or perform labor to perform and complete the Project Decommission and Restoration Work or the Project Restoration Work; and

WHEREAS, under this Bond, the Surety and its successors and assigns, jointly and severally, guarantee the prompt performance and completion of the Project Decommission and Restoration Work and/or the Project Restoration Work on all land that is part of the Project, and shall hire all necessary contractors and subcontractors and material suppliers to furnish materials and perform labor in the completion of the Project Decommission and Restoration Work and/or the Project Restoration Work, and pay all insurance premiums for said Work, in the event that the Principal, or its contractors and subcontractors, fail to perform and complete the Project Restoration Work and/or the Decommission and Restoration Work; and

WHEREAS, under this Bond, the Surety and its successors and assigns, jointly and severally, shall make prompt payments to all contractors and subcontractors and material suppliers who furnish materials or perform labor in the completion of the Project Decommission and Restoration Work and/or the Project Restoration Work, and pay all insurance premiums for said Work, on all land that is part of the Project in the event that the Principal fails to pay contractors and subcontractors and material suppliers who furnish materials or perform labor in the completion of the Project Restoration Work and/or the Decommission and Restoration Work; and

WHEREAS, the Obligee is the “Primary Obligee” of this Bond. The other landowners whose land is improved with Project improvements are “Secondary Obligees” of this Bond. In accordance with the attached “Dual Obligee Rider, which is made a part of this Bond, and the terms of the Decommissioning Plan, the Secondary Obligees are not authorized to make a claim(s) upon this Bond, unless the Primary Obligee fails to make a claim on behalf of one or more of the Secondary Obligees after Abandonment (as defined in the AIMA or the WECS Siting Ordinance) relative to the failure by the Principal or the Surety to perform or complete or pay for the Project Decommission and Restoration Work; and

WHEREAS, the Surety, and its successors and assigns, agree to indemnify the Obligee and the Secondary Obligees from the failure of the Principal to perform or complete or pay for (a) the Project Restoration Work (with respect to the Obligee only) or (b) the Decommission and Restoration Work in conformity with the terms of the WECS Siting Ordinance, the AIMA, and the Decommissioning Plan; and

NOW THEREFORE, the condition of the Surety’s performance and payment obligations under this Bond is such, that if the above referenced Principal shall perform in accordance with the aforesaid WECS Siting Ordinance, the AIMA, and the Decommissioning Plan and indemnify the Obligee or the Secondary Obligees against all loss caused by Principal’s breach of any obligations to perform or complete or pay for the Project Restoration Work (with respect to the Obligee only) and/or the Decommission and Restoration Work, then the Surety’s performance and payment obligations under this Bond shall be void; otherwise, to remain in full force and effect unless canceled as set forth below.

The term of this Bond shall apply from _____ day of _____, 2022 until _____ day of _____, 2023, and may be extended by the Surety by a continuation certificate, however, neither nonrenewal by the Surety, nor the failure or inability of the Principal to file a replacement bond in the event of nonrenewal, shall itself constitute a loss to the Obligees or the Secondary Obligees recoverable under this Bond or any renewal or continuation thereof.

PROVIDED, FURTHER, that the Surety, for value received stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Project Restoration Work and/or the Decommission and Restoration Work to be performed thereunder or the specifications accompanying the same shall in any way affect the Surety's obligations under this Bond, and it does waive notice of any such change, extension of time, alteration or addition to the terms of the Project Restoration Work and/or the Decommission and Restoration Work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the Principal and any contractors and subcontractors and material suppliers shall abridge the right of the Obligees or the Secondary Obligees hereunder, whose claim may be unsatisfied.

THIS BOND may be cancelled by the Surety by giving sixty (60) days written notice by certified mail to the Obligees. Such cancellation shall not affect any liability the Surety may have or incurred under this Bond prior to the effective date of the termination. No later than five (5) business days after the effective date of the termination of this Bond, either by the terms of the Bond or the Decommissioning Plan, the Obligees shall return this Bond to the address provided below:

Philadelphia Surety Company
Attention: Scott Mandeville, Regional Manager
5517 159th Avenue SE
Snohomish, WA 98290

THIS BOND is signed, sealed, dated on the _____ day of _____, 2023.

THIS BOND is effective the _____ day of _____, 2023.

PRINCIPAL

By:

Philadelphia Indemnity Insurance Company

By: Allison Thornhill, Attorney-_____

in-Fact

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Illinois where the Project is located.



DUAL OBLIGEE RIDER
(To be attached to Bond at time of issuance)

TO BE ATTACHED TO AND FORM PART OF Bond No. _____, dated concurrently with the execution of this Rider, by Philadelphia Indemnity Insurance Company, as Surety, on behalf of, Lotus Wind LLC as Principal, and in favor of Macoupin County, Illinois ("Primary Obligee") and each of the landowners whose land is improved with Project improvements based on signed lease agreements, license agreements or easement agreements with the Principal or units of local government whose public utility easements or public rights of way have Project improvements to be located or located within them, as "Secondary Obligees".

IT IS HEREBY UNDERSTOOD AND AGREED that the attached Bond is hereby amended to include the following:

In accordance with the terms of the Decommissioning Plan, the Secondary Obligees are not authorized to make a claim(s) upon this Bond, unless the Primary Obligee fails to make a claim on behalf of one or more of the Secondary Obligees after Abandonment (as defined in the AIMA or the WECS Siting Ordinance) relative to the failure by the Principal or the Surety to perform or complete or pay for the Decommission and Restoration Work.

In no event shall the liability of the Principal and the Surety to the Obligee, or either of them, in the aggregate, exceed the penal sum stated in the attached Bond.

IT IS FURTHER UNDERSTOOD AND AGREED that nothing contained in this Rider shall be held to change, alter or vary the terms of the attached Bond except as set forth hereinabove. In the event of a conflict between the Bond and this Rider, the parties agree that this Rider shall govern and control. All references to the Bond, either in the Bond or in this Rider, shall include and refer to the Bond as supplemented and amended by this Rider. Except as provided by this Rider, all other terms and conditions of the Bond remain in full force and effect.

This Rider may be executed in two or more counterparts, each of which shall be deemed an original, but which together shall constitute one and some instrument.

SIGNED, SEALED AND DATED this ____ day of _____, 2023.

PRINCIPAL:

SURETY: Philadelphia Indemnity Insurance Company

Signature: _____ Signature: _____

Name and Title: _____

Agreed to and accepted by:

OBLIGEE:

OBLIGEE:

Signature: _____ Signature: _____

Name and Title: _____

Name and Title: _____

Attachment C

Draft Affidavit for Obligation to Decommission

Affidavit of Ken Young
Lotus Wind, LLC Responsibility for Costs of Decommissioning

Ken Young, being first duly sworn under oath, states as follows:

1. I am Chief Operating Officer employed by Apex Clean Energy, LLC (“Apex”), the sole owner of Lotus Wind, LLC. Lotus Wind, LLC seeks to develop an up to 204 MW nameplate capacity wind energy conversion system (WECS) known as the Lotus Wind Project (or “Project”) in Macoupin County, Illinois. I have personal knowledge of all the facts stated in this Affidavit, except as to matters stated to be on information or belief, and, if called to testify as a witness in this matter, could testify fully and competently to those facts.

2. With respect to decommissioning the Lotus Wind Project, Apex takes full financial responsibility to decommission the Lotus Wind Project in accordance with the Decommissioning and Site Reclamation Plan, the Agricultural Impact Mitigation Agreement, Leases and any other specific agreement with a landowner that is set forth in writing.

3. Landowners have voluntarily entered into Leases or Good Neighbor Agreements, the form of which have been provided to the Macoupin County Board, through which Lotus Wind, LLC assumes all financial responsibility for decommissioning and restoration. Further, each participating landowner was sent a copy of the Agricultural Impact Mitigation Agreement on or about March 23, 2023, by the Department of Agriculture, which further indicates that Lotus Wind, LLC assumes all financial responsibility for decommissioning and restoration.

4. The above is true and accurate to the best of my personal knowledge and based upon my review of the records set forth above.

Under penalties as provided by law pursuant to Section 1-109 of the Code of Civil Procedures, the undersigned certifies that the statements set forth in this Affidavit are true and

correct, except as to the matters stated to be on information or belief and as to such matters, the undersigned certifies as that he verily believes the same to be true.


Dated: April 3, 2023

Lotus Wind, LLC

By: Apex Clean Energy Finance, LLC
Its: Sole Member

By: Apex GBR, LLC
Its: Sole Member

By: Apex Clean Energy Holdings, LLC
Its: Manager

By: _____

Name: Ken Young

Title: Chief Operating Officer