

**Attachment 2.14**  
**Preliminary Decommissioning Plan**

A DRAFT DECOMMISSIONING PLAN FOR

# Overland Pass East Wind Project

Sedgwick County, Colorado

MARCH 26, 2024

PREPARED FOR:



PREPARED BY:

**Westwood**

# Draft Decommissioning Plan

Overland Pass East Wind Project

Sedgwick County, Colorado

**Prepared for:**

Overland Pass Energy, LLC  
11100 Wayzata Blvd, Suite 450  
Minnetonka, MN 55305

**Prepared by:**

Westwood Professional Services  
12701 Whitewater Drive, Suite 300  
Minnetonka, MN 55343  
(952) 937-5150

Project Number: R0034226.00

Date: March 26, 2024

# Table of Contents

- 1.0 Introduction / Project Description ..... 1
  - 1.1 Project Description.....1
  - 1.2 Life of the Project and Triggering Events for Decommissioning .....1
- 2.0 Proposed Future Land Use..... 2
- 3.0 Engineering Techniques..... 2
  - 3.1 Decommissioning of Project Components .....3
    - 3.1.1 Public Road Improvement and Access Road Modifications and Removal .....3
    - 3.1.2 Crane Path and Crane Pad Preparation and Removal .....3
    - 3.1.3 Wind Turbine Felling.....3
    - 3.1.4 Wind Turbine Removal.....3
    - 3.1.5 Turbine Foundation Removal and Restoration .....4
    - 3.1.6 Meteorological (Met) Towers.....4
    - 3.1.7 Access Roads .....4
    - 3.1.8 Underground Electrical Collection Lines .....5
    - 3.1.9 Overhead Electrical Collection / Transmission Lines .....5
    - 3.1.10 Substation.....5
    - 3.1.11 Operations and Maintenance Building .....6
  - 3.2 Reclamation.....6
- 4.0 Best Management Practices (BMPs) ..... 7
  - 4.1 Erosion Control .....7
  - 4.2 Sediment Control .....7
  - 4.3 Controlling Stormwater Flowing onto and Through the Project.....7
  - 4.4 Permitting.....7
  - 4.5 Health and Safety Standards .....8
- 5.0 Timeline ..... 8
- 6.0 Decommissioning Costs ..... 8
- 7.0 Financial Assurance and Decommissioning Provisions..... 9

## Attachments

Attachment A: Decommissioning Cost Estimate [For Future Use]



# 1.0 Introduction / Project Description

## 1.1 Project Description

The Overland Pass East Wind Project (“Project”) is a wind power generation project proposed by Overland Pass East, LLC (“Applicant”) in Sedgwick County, Colorado. The Project will include the construction of approximately 267 individual turbines for a nameplate capacity of up to 1250 MW. The Project may also include, but is not limited to, access roads, meteorological (met) towers, a substation, underground and overhead collection lines, and an operation and maintenance (O&M) facility. The preliminary turbine technology is based on a 4.5-megawatt (MW) turbine model and is subject to change prior to construction.

This Decommissioning Plan (“Plan”) has been prepared in accordance with the Sedgwick County Comprehensive Plan and Zoning Ordinance Wind and Solar Amendment (“Ordinance”). 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 wind facility has not operated for eighteen (18) consecutive months or has surpassed the useful lifespan of the turbines and facilities.

At the time this Plan was prepared, the Project design was in process. Once the Project layout has been solidified, this Plan shall be updated to reflect any additional Project-specific design information and to include a comprehensive decommissioning cost estimate, as required by the Ordinance.

## 1.2 Life of the Project and Triggering Events for Decommissioning

The Project is anticipated to have an operational lifespan of at least 30 years. During the 30 years of operation, the Applicant commits to operating the facility in a working and safe condition. When the Project has reached the end of its operational life, it will either be decommissioned or repowered with newer technology.

Decommissioning shall commence following the end of the Project’s useful life, including any extensions, by notice to Sedgwick County from the Applicant, or following a period of eighteen (18) months of continuous non-operation of the facility. Exception shall be given if non-operation is caused by force majeure, which refers to any fire, earthquake, flood, or other casualty, condemnation or accident; strikes or labor disputes; war, acts of terrorism, civil strife or other violence; any law, order, proclamation, regulation, ordinance, action, demand or requirement of any government agency or utility; epidemic/pandemic; or any other act or condition beyond the reasonable control of the Applicant, so long as the Applicant has not caused the event of force majeure through its own act or negligence.

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 project area was primarily used for agricultural production of corn, wheat, millet, and other crops, with smaller areas of pastureland. 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 as documented in pre-construction photographs. 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, overhead transmission lines, and substation) for either resale or scrap.
- Removal of turbine foundations to a depth of a minimum of 24 inches below grade.
- Removal of other underground components (junction boxes, transformer and substation foundations) to a depth of a minimum of 24 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 may be consulted 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. Underground utility lines, if deeper than a minimum of 24 inches below ground surface elevation, shall 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). 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.

Decommissioning of the wind facility will not interfere with surrounding land use.

### 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 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

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

During decommissioning, the Applicant will adhere to common practices for turbine removal. This Plan assumes that the turbines not being resold 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. Felling consists of disconnecting electrical connections and draining oil, hydraulic fluid, and any other liquids from the turbine. A long cable is attached to the nacelle and to a heavy piece of equipment, such as a bulldozer, positioned on the access road. Wedge shaped areas are then cut out of the tower steel using cutting torches to create a hinge that will direct the turbine to fall on the access road when pulled by the dozer.

#### 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. The components of the wind turbines that are not designated for resale 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.

### **3.1.5 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 24 inches 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 24 inches 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 and revegetated to match pre-construction conditions.

### **3.1.6 Meteorological (Met) Towers**

Following disconnection of electrical components, 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 a minimum of 24 inches. Concrete will be broken into transportable pieces and hauled off site. Following removal of the foundations, subsoil will be decompacted. Topsoil will be reapplied to match the surrounding grade.

### **3.1.7 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 and restored to pre-construction tillable conditions or revegetated.

### **3.1.8 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 a minimum of 24 inches, such as cables entering and exiting the turbine foundations, junction boxes, or substation components, 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.

### **3.1.9 Overhead Electrical Collection / Transmission Lines**

Overhead electrical lines may be constructed as part of the Project to connect the project to a point of interconnection. All poles, conductors, switches, and lines associated with the overhead electrical will be removed and hauled off site to a recycling facility or disposal site. Underground infrastructure such as pole foundations will be removed down to a minimum of 24 inches below grade. Most transmission line poles are direct burial, so there is no foundation remaining after removal. Pole foundation holes will be filled with a suitable clean compactable material. Topsoil will be applied and the areas will be tilled to a farmable condition or revegetated to pre-construction conditions, depending on the pre-construction land use of that area. Transmission line work requires specialized equipment including man lifts, cable reels, pole removal/installation lifts, etc.

### **3.1.10 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 a minimum of 24 inches. 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 an 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 and the site will be revegetated to match pre-construction conditions.

### 3.1.11 Operations and Maintenance Building

It is assumed that the O&M Building will be a sturdy, general purpose steel building. The building may be resold or repurposed at the time of decommissioning. 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

Following the removal of the wind facilities, the Applicant will use commercially reasonable efforts to restore any disturbed soil and vegetation to a pre-construction condition. Restoration efforts shall use photos taken prior to construction for reference in restoring soil and vegetation. 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 as needed to ensure proper density of topsoil consistent and compatible with the surrounding area and associated land use. Any holes or ditches created by the removal facilities shall be backfilled. Disturbed soil shall be re-seeded to promote the growth of an appropriate vegetation to the site area.

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.

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

## 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 BMPs listed in this section are examples; final BMPs will be determined based on site permits, decommissioning specifics, site conditions, and other factors at the time of decommissioning. Because decommissioning will entail disturbance of more than one acre of soil, the Applicant will prepare a SWPPP and obtain coverage under the Colorado Discharge Permit System (CDPS) General 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.

### 4.1 Erosion Control

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

In areas of steep slope or significant disturbance, it may be necessary to control the stormwater flowing onto and through the site. Stormwater BMPs may include diversion berms, construction swales and ditches, or rock check dams, Diversion Berms/Swales/Ditches: It may be necessary to direct diverted flow toward temporary settling basins via berms, swales, or ditches.

### 4.4 Permitting

All decommissioning and reclamation activities will comply with Federal and CDPS General Permit requirements. Decommissioning activities that will disturb more than one acre of soil will require coverage under the CDPS General 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.

If necessary for decommissioning activities, wetlands and waters permits will be obtained from the USACE or Colorado Parks and Wildlife. 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 site workers, including subcontractors, will be required to read, understand, and abide by the plans. 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 shall commence following the end of the Project's useful life, including any extensions, by notice to Sedgwick County from the Applicant, or following a period of eighteen (18) months of continuous non-operation of the wind facility. The estimated timeline for decommissioning will be incorporated into this Plan once the Project design has been finalized. 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.

## 6.0 Decommissioning Costs

This Decommissioning Plan shall be updated to include a comprehensive decommissioning cost estimate once the Project layout has been established. The cost estimate for decommissioning and reclamation of the Project will be prepared in current dollars, with the salvage value of equipment or materials calculated separately. The estimate will include:

- (i) An analysis of the physical activities necessary to implement the approved 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 will be used to develop the cost estimate:

1. Project quantities will be based on the most current site layout.
2. Scrap values will be obtained from the selected recycling facility, if available, scrapmonster.com, or a similar aggregate scrap pricing source. The estimate will use current scrap prices, and the values will be updated through regular revisions over the life of the project.

The total estimated cost of the decommissioning will be included in this section. Estimated costs will be shown in total and on a per-turbine basis. Estimated salvage value and the net costs (estimated construction costs minus estimated salvage value) will also be included in the Plan.

## 7.0 Financial Assurance and Decommissioning Provisions

The Applicant proposes to calculate and provide an estimate of the net decommissioning costs, certified by a Professional Engineer, at the time the Final Decommissioning Plan is submitted, prior to the start of construction, and once the full engineering details of the final construction plan are known. This net cost estimate will run with the Project and may be re-evaluated and updated (no more frequently than every five years) upon request by the County. Following Special Use Permit approval and prior to issuance of a construction permit and/or building permit(s) for the Project, Applicant shall provide financial security to the County for the estimated net decommissioning costs in such form as agreed upon between the Applicant and the Sedgwick County Board of Commissioners. Such security shall also be accompanied by a mutually-approved Security Agreement, detailing what conditions under which the security could be called upon or released. Applicant proposes, for County review and approval, the following escalating schedule for posted security:

- 1) Prior to Issuance of Building Permit: Applicant posts Security covering 25% of estimated net decommissioning costs,
- 2) At 5-year Anniversary of Commercial Operations Date: Applicant posts additional Security an additional 25% of estimated net decommissioning costs (50% total),
- 3) At 10-year Anniversary of Commercial Operations Date: Applicant posts additional Security an additional 25% of estimated net decommissioning costs (75% total),
- 4) At 15-year Anniversary of Commercial Operations Date: Applicant posts additional Security an additional 25% of estimated net decommissioning costs (100% total),
- 5) Applicant continues to maintain 100% Security through Project decommissioning.

The Plan shall be binding upon the Applicant or their operator and any of their successors, assigns, or heirs. The County shall have the right to review final decommissioning and reclamation to confirm it is consistent with the Plan. The County shall have access to the Project site, pursuant to reasonable notice, to effect or complete decommissioning if decommissioning does not proceed in compliance with the Plan or landowner agreement(s).

The Applicant or their operator may apply to the Board for release of financial security once the decommissioning of the Project has been completed. The request for release of the financial security must be submitted in writing to the Board a minimum of ten (10) working days before the next regularly scheduled meeting at which the Board may consider the request. Financial security for decommissioning for the Project may be released when decommissioning of the Project has been satisfactorily completed and accepted; the permit has been surrendered to the County before commencement of any physical activity on the Project site, or the land use has been abandoned and the site returned to its original condition or to a condition acceptable to the County.





# **Attachment A**

**Decommissioning Cost Estimate  
[for future use]**

**DRAFT**

*Left blank for future Attachment A population*