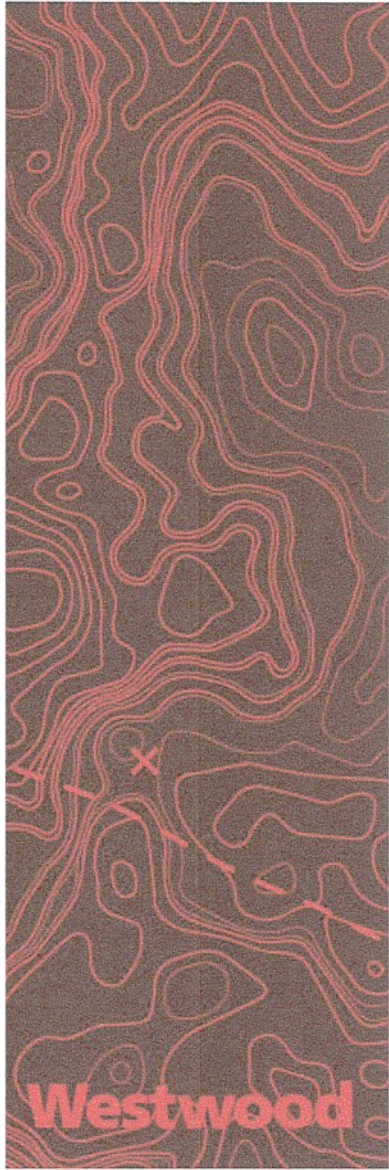


# Coles Wind Decommissioning and Site Reclamation Costs

Coles County, Illinois

March 17, 2025

**Westwood**



## Decommissioning Plan Requirements

Per the Coles County Wind Ordinance Decommissioning and Site Reclamation Section, testimony to support the calculation of costs provided in the Decommissioning Plan during public hearing is required

# Basis of Estimate

Costs were estimated based on the current design, pricing, technology, and regulatory requirements:

1. Project quantities, like road lengths and cable wiring, are based on the most current Project design
2. Unit pricing for this labor and equipment was obtained from RS Means
3. Hauling and transportation costs for each line item were calculated using travel times to currently operational facilities in the vicinity of the Project

| Facility Name                                                             | Disposal Type         | Distance (mi) | Travel Time (min) |
|---------------------------------------------------------------------------|-----------------------|---------------|-------------------|
| WM - Coles County Transfer Station, 6111 W State St, Charleston, IL 61920 | Landfill              | 10            | 13                |
| Harris Metals & Recycling, 1213 N 11th St, Mattoon, IL 61938              | Recycling             | 15            | 20                |
| Springfield Concrete Recycling, 2100 E Moffat, Springfield, IL 62702      | Concrete Recycling    | 95.5          | 102               |
| McCallister Power Systems, 20 W Margaret Dr, Terre Haute, IN 47803        | Transformer Recycling | 56            | 67                |
| Global Fiberglass Solutions, 927 N 19th Avenue E, Newton, IA 50208        | Fiberglass Recycling  | 360           | 315               |

# Basis of Estimate

Mobilization/demobilization costs are assumed to be 7% of the total direct cost of decommissioning

Permitting costs will cover decommissioning activities

|                             | Quantity | Unit     | Unit Cost      | Total Cost      |
|-----------------------------|----------|----------|----------------|-----------------|
| Mobilization/Demobilization | 1        | Lump Sum | \$1,135,000.00 | \$1,135,000     |
| 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            |          |          |                | <u>\$35,000</u> |

Public Road Restoration is included for incidental impacts during decommissioning.  
Crop loss is also included in the estimate on a per turbine basis

|                          |     |         |             |              |
|--------------------------|-----|---------|-------------|--------------|
| Public Roads Restoration | 70  | Miles   | \$44,000.00 | \$3,080,000  |
| Total Direct Costs       |     |         |             | \$17,377,413 |
| Contingency (15%)        | 15% | Percent |             | \$2,606,612  |
| Crop Loss (102 Acres)    | 102 | Acres   | \$1,300.00  | \$132,600    |

# Decommissioning on Reclamation Costs

## Wind Turbine Generator and LiDAR/ADLS Tower Costs:

- Tower Wire Disconnection
- Demolition/Dismantling Activities for Structural and Foundation Components
- Tower, Blades, and Foundation Material Hauling and Disposal or Recycling at Facilities
- Tower Foundation Excavations and backfill
- Reclamation and Earthwork for Tower Areas and Disturbed Areas

|                                                               |        |             |            |                    |
|---------------------------------------------------------------|--------|-------------|------------|--------------------|
| <b>Wind Turbine Generators</b>                                |        |             |            |                    |
| Disconnect Turbine Wiring                                     | 51     | Each        | \$3,060.80 | \$156,101          |
| Fell Turbine                                                  | 51     | Each        | \$2,043.25 | \$104,206          |
| Process to Size and Load Turbine Components                   | 17,710 | Tons        | \$160.18   | \$2,836,788        |
| Haul Turbine Components Offsite for Recycling (except blades) | 17,710 | Tons        | \$6.23     | \$110,333          |
| Haul Turbine Components For Disposal (except blades)          | 3,694  | Tons        | \$4.78     | \$17,657           |
| Turbine Component Disposal (except blades)                    | 3,694  | Tons        | \$81.00    | \$299,214          |
| Haul Fiberglass Blades For Disposal                           | 1,645  | Tons        | \$4.78     | \$7,863            |
| Confirm Removal of Turbine Residue                            | 51     | Each        | \$2,191.65 | \$111,774          |
| Fiberglass Blades Disposal                                    | 1,645  | Tons        | \$81.00    | \$133,245          |
| Excavate Around Turbine Foundation                            | 51     | Each        | \$21.14    | \$1,078            |
| Remove Turbine Foundation and Load                            | 2,678  | Cubic Yards | \$275.99   | \$739,101          |
| Backfill Excavation Area from Turbine Foundation Removal      | 51     | Each        | \$224.49   | \$11,449           |
| Haul Concrete (Turbine Foundation)                            | 5,423  | Tons        | \$25.34    | \$137,419          |
| Disposal of Concrete from Turbine Foundation                  | 2,678  | Cubic Yards | \$81.00    | \$216,918          |
| Decompact Wind Turbine Generator Site                         | 51     | Each        | \$160.81   | \$8,201            |
| Grade Wind Turbine Generator Site                             | 51     | Each        | \$2,642.75 | \$134,780          |
| Erosion and Sediment Control at Turbine/Transformer Site      | 51     | Each        | \$1,313.19 | \$66,973           |
| Topsoil and Revegetation at Turbine/Transformer Sites         | 51     | Each        | \$994.84   | \$50,737           |
| Till to Farmable Condition                                    | 96.8   | Acres       | \$177.52   | \$6,533            |
| <b>Subtotal Wind Turbine Generators</b>                       |        |             |            | <b>\$5,150,370</b> |
| <b>LiDAR &amp; ADLS Towers</b>                                |        |             |            |                    |
| Disconnect Tower Wiring                                       | 2      | Each        | \$1,530.40 | \$3,061            |
| Dismantle, Disassemble, and Load Tower Components             | 2      | Each        | \$5,208.79 | \$10,418           |
| Haul Tower Components Off Site                                | 8.0    | Tons        | \$6.23     | \$50               |
| Excavate Around Tower Foundation                              | 2      | Each        | \$4.71     | \$9                |
| Remove Tower Foundation and Load                              | 2.3    | Cubic Yards | \$275.99   | \$635              |
| Haul Concrete (Tower Foundation)                              | 0.2    | Tons        | \$25.34    | \$5                |
| Disposal Concrete from Tower                                  | 0.2    | Tons        | \$81.00    | \$16               |
| Grade Tower Site                                              | 2      | Each        | \$1,500.50 | \$3,001            |
| Erosion and Sediment Control at Tower Site                    | 2      | Each        | \$418.00   | \$836              |
| Topsoil and Revegetation at Tower Site                        | 0.1    | Acre        | \$1,379.40 | \$138              |
| <b>Subtotal LiDAR/ADLS Towers</b>                             |        |             |            | <b>\$18,169</b>    |

# Decommissioning and Reclamation Costs

## Electrical Collection Costs:

- Cable Removal for Cables Running to Towers and Junction Boxes
- Cable Hauling and Recycling at facilities
- Reclamation and Earthwork at Junction Box Areas

## Access Road Costs:

- Aggregate, Geotextile Fabric, and Stormwater Controls Removal
- Material Hauling and Disposal at landfill
- Reclamation and Earthwork for Access Road Corridors

|                                                                      |      |           |            |                 |
|----------------------------------------------------------------------|------|-----------|------------|-----------------|
| <b>Electrical Collection System</b>                                  |      |           |            |                 |
| Removal of Underground Collector System Cables Shallower than 5 Feet | 55   | Locations | \$400.00   | \$22,000        |
| Haul Underground Collector System Cables                             | 3.8  | Tons      | \$6.23     | \$24            |
| Disposal of Removed Cables (See Salvage Value)                       | 3.8  | Tons      | \$0.00     | \$0             |
| Removal of Junction Box                                              | 4    | Each      | \$100.00   | \$400           |
| Erosion and Sediment Control at Junction Box Location                | 160  | Feet      | \$4.18     | \$669           |
| Topsoil and Revegetation at Junction Box Locations                   | 0.04 | Acres     | \$1,379.40 | \$55            |
| <b>Subtotal Electrical Collection System</b>                         |      |           |            | <b>\$23,148</b> |

|                                                             |         |              |            |                    |
|-------------------------------------------------------------|---------|--------------|------------|--------------------|
| <b>Access Roads</b>                                         |         |              |            |                    |
| Remove and Load Gravel Surfacing from Access Roads          | 36,614  | Cubic Yards  | \$2.85     | \$104,350          |
| Haul Gravel Removed from Access Roads                       | 59,315  | Tons         | \$25.34    | \$1,503,042        |
| Disposal of Gravel Removed from Access Roads                | 59,315  | Tons         | \$81.00    | \$4,804,554        |
| Remove and Load Geotextile Fabric                           | 205,957 | Square Yards | \$0.91     | \$187,421          |
| Haul Geotextile Fabric                                      | 45      | Tons         | \$4.78     | \$215              |
| Dispose of Geotextile Fabric                                | 45      | Tons         | \$81.00    | \$3,645            |
| Remove and Load Culvert from Beneath Access Roads           | 32      | Each         | \$448.00   | \$14,336           |
| Haul Culvert Removed from Access Roads                      | 10      | Tons         | \$4.78     | \$48               |
| Disposal of Culverts                                        | 10      | Tons         | \$81.00    | \$810              |
| Remove Low Water Crossing from Access Roads                 | 1       | Each         | \$8,400.00 | \$8,400            |
| Haul Low Water Crossing Materials Removed from Access Roads | 1       | Each         | \$4.78     | \$5                |
| Disposal of Low Water Crossing Materials                    | 1       | Each         | \$162.00   | \$162              |
| Decompact Access Road Corridor                              | 92,680  | Linear Feet  | \$0.08     | \$7,414            |
| Grade Access Road Corridor                                  | 92,680  | Linear Feet  | \$1.56     | \$144,581          |
| Erosion and Sediment Control Along Access Roads             | 69,510  | Linear Feet  | \$4.18     | \$290,552          |
| Topsoil and Revegetation on Removed Access Road Area        | 51      | Acres        | \$1,379.40 | \$70,349           |
| <b>Subtotal Access Roads</b>                                |         |              |            | <b>\$7,134,885</b> |

# Decommissioning and Reclamation Costs

## Substation Costs:

- Transformer, Foundation, Structural Metal, and Aggregate Removal
- Material Hauling/Freighting and Disposal or Recycling at facilities
- Reclamation and Earthwork for Substation site

## O&M Facility Costs:

- Building, Foundation, Site Improvements, and Aggregate Removal
- Material Hauling and Disposal at landfill
- Reclamation and Earthwork for O&M site

|                                                                                    |       |             |             |                  |
|------------------------------------------------------------------------------------|-------|-------------|-------------|------------------|
| <b>Substation</b>                                                                  |       |             |             |                  |
| Disassembly and Removal of Main Power Transformer(s)                               | 1     | Each        | \$4,500.00  | \$4,500          |
| Freight Transformer(s) Offsite                                                     | 1     | Each        | \$560.70    | \$561            |
| Disposal of Transformer (Including Oil; Assume Salvage Value)                      | 1     | Each        | \$0.00      | \$0              |
| Excavate Around Transformer Foundation(s)                                          | 1     | Each        | \$1,843.74  | \$1,844          |
| Remove Complete Transformer Foundation(s)                                          | 1     | Each        | \$25,199.95 | \$25,199         |
| Backfill Excavation Area from Transformer Foundation Removal                       | 1     | Each        | \$315.17    | \$315            |
| Haul Concrete (Transformer, Switch Gear, etc. Foundations)                         | 213   | Tons        | \$25.34     | \$5,397          |
| Disposal of Concrete from Transformer Foundation                                   | 213   | Tons        | \$81.00     | \$17,253         |
| Demolish Substation Site Improvements (fences, etc.)                               | 1     | Lump Sum    | \$3,500.00  | \$3,500          |
| Demolish Control Building and Foundation                                           | 1     | Lump Sum    | \$12,000.00 | \$12,000         |
| Remove Medium/High Voltage Equipment                                               | 1     | Lump Sum    | \$8,500.00  | \$8,500          |
| Remove Structural Steel Substation Frame                                           | 1     | Lump Sum    | \$3,500.00  | \$3,500          |
| Haul - Demolition Materials, Removed Equipment & Structural Steel                  | 1     | Lump Sum    | \$1,246.00  | \$1,246          |
| Disposal of Demolition Materials, Removed Equipment and Structural Steel (Salvage) | 1     | Lump Sum    | \$0.00      | \$0              |
| Remove and Load Gravel Surfacing from Substation Site                              | 807   | Cubic Yards | \$2.85      | \$2,300          |
| Haul Gravel Removed from Substation Site                                           | 1,307 | Tons        | \$25.34     | \$33,119         |
| Disposal of Gravel from Substation Site                                            | 1,307 | Tons        | \$81.00     | \$105,867        |
| Decompact Substation Site                                                          | 1.0   | Acre        | \$222.97    | \$223            |
| Grade Substation Site                                                              | 1.0   | Acre        | \$4,240.48  | \$4,240          |
| Erosion and Sediment Control at Substation Site                                    | 626   | Linear Feet | \$4.18      | \$2,617          |
| Topsoil and Revegetation at Substation Site                                        | 1.0   | Acre        | \$1,379.40  | \$1,379          |
| <b>Subtotal Substation</b>                                                         |       |             |             | <b>\$228,561</b> |
| <b>O&amp;M Building</b>                                                            |       |             |             |                  |
| 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         | \$25.34     | \$15,533         |
| Crush Concrete                                                                     | 613   | Ton         | \$28.00     | \$17,164.00      |
| Disposal of Concrete from O&M Building Foundation                                  | 613   | Ton         | \$81.00     | \$49,653         |
| 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                                       | 4,033 | Cubic Yards | \$2.85      | \$11,494         |
| Haul Gravel Removed from O&M Site                                                  | 4,033 | Cubic Yards | \$25.34     | \$102,196        |
| Disposal of Gravel from O&M Site                                                   | 4,033 | Cubic Yards | \$81.00     | \$326,673        |
| Decompact O&M Building Site                                                        | 5.0   | Acre        | \$222.97    | \$1,115          |
| Grade O&M Building Site                                                            | 5.0   | Acre        | \$4,240.48  | \$21,202         |
| Erosion and Sediment Control at O&M Building Site                                  | 1,400 | Linear Feet | \$4.18      | \$5,852          |
| Topsoil and Revegetation at O&M Building Site                                      | 5.0   | Acres       | \$1,379.40  | \$6,897          |
| <b>Subtotal O&amp;M Building</b>                                                   |       |             |             | <b>\$572,280</b> |

# Salvage

Salvage values for recyclable materials are reflected in current prices

Deconstruction activity costs and the hauling/freight costs are separated from the disposal costs or salvage value to make revisions to salvage values more transparent

|                                           |           |         |          |                    |
|-------------------------------------------|-----------|---------|----------|--------------------|
| Salvage/Recycle                           |           |         |          |                    |
| Turbine Towers (Structural Steel)         | 16,930    | Tons    | \$225.00 | \$3,809,250        |
| Turbine Nacelles (Structural Steel)       | 3,694     | Tons    | \$225.00 | \$831,150          |
| ADLS and LiDAR Towers (Structural Steel)  | 7.6       | Tons    | \$225.00 | \$1,710            |
| Substation (Structural Steel)             | 10        | Tons    | \$225.00 | \$2,250            |
| Turbine Generators                        | 1,217,369 | Pounds  | \$0.33   | \$401,732          |
| Aluminum Electrical Conductor (Supported) | 7,600     | Pounds  | \$0.81   | \$6,156            |
| Transformers (copper windings)            | 9,000     | Pounds  | \$0.32   | \$2,903            |
| Transformers (oil)                        | 15,000    | Gallons | \$0.70   | \$10,500           |
| Subtotal Salvage                          |           |         |          | <u>\$5,065,650</u> |

Westwood