



Juliet Solar

Exhibit K

Decommissioning Plan

Case No. 20-1760-EL-BGN

# Decommissioning Plan

## Introduction

Juliet Energy Project, LLC (Juliet) has prepared this Decommissioning Plan for the approximately 670-acre, 101 megawatt, solar powered electric generation facility (the Facility) in Wood County, Ohio. This Plan was prepared to ensure proper decommissioning of the Facility. This Plan provides a description of decommissioning and restoration of the Facility to meet the requirements of the Ohio Power Siting Board (OPSB).

## Solar Farm Components

The Facility components will include approximately 341,000 photovoltaic solar panels that will be mounted on single axis tracker systems. Steel piles will provide the foundations for the tracker systems. Moreover, Facility components include approximately 31 inverters (all rated at 3.26 MW) and medium voltage transformers, underground and overhead electrical cabling and conduits, a Facility substation, a short overhead transmission line, an operations and maintenance building, a Supervisory Control and Data Acquisition (SCADA) system, a control building, private access roads with gated ingress/egress points, and security fencing. Temporary facilities associated with construction will include a construction laydown yard and temporary office and bathroom trailers. The components of the Facility to be decommissioned are described in detail in the Application for a Certificate of Environmental Compatibility and Public Need.

## Anticipated Project Life

Facility decommissioning will be initiated when the Facility reaches the end of its operational life. Juliet will be responsible for the decommissioning of the Facility. The operational life of the Facility is anticipated to be 30-40 years. At the end of the Facility's useful life, the panels and associated components will be decommissioned and removed from the Facility site. Juliet will notify the OPSB at least 30 days prior to start of decommissioning.

## Permitting

Prior to the start of decommissioning Juliet will obtain all necessary permits, including, but not limited to:

- Compliance with Section 404 of the Clean Water Act.
- Stormwater Pollution Prevention Plan (SWPPP) in accordance with Ohio EPA General Construction Stormwater Permit.
- Wood County building, road, or erosion control permits (as necessary).
- Wood County Soil and Water Conservation District permit for activity that involves the crossing, modifying, or discharge of stormwater into a county drain.
- Ohio Department of Transportation Special Hauling Permits (as necessary).

## Decommissioning Sequence

Decommissioning activities will begin within 12 months of the Facility ceasing operation and are anticipated to be completed in three to six months. Monitoring and site restoration may extend beyond this period to ensure successful revegetation and rehabilitation. All Facility components constructed

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above ground, and any below grade components to a depth of at least three feet below grade, will be removed and transported offsite for disposal or recycling. All required approvals and permits will be obtained prior to the start of decommissioning. The following activities are anticipated to be carried out in the order described below, although overlap is expected.

1. Prepare the site for component removal, including strengthening the access roads, if needed
2. Install temporary fencing and best management practices (BMPs) to protect sensitive resources
3. De-energize solar arrays, if not already de-energized
4. Dismantle panels and racking
5. Remove frame and internal components
6. Remove portions of structural foundations to at least three feet below the surface and backfill sites
7. Remove inverters and transformers
8. Remove electrical cables and conduits to at least three feet below the surface
9. Remove access and internal roads and grade site (unless requested to be kept in place by owner, and if doing so does not violate any permits or legal requirements)
10. Drain tiles damaged during the decommissioning activities will be replaced with functional equivalent system as needed or as requested by the owner
11. Restore and revegetate disturbed land to pre-construction conditions to the extent practicable

## Decommissioning Expenses and Financial Assurance

Prior to the start of construction, Juliet will retain an independent and registered professional engineer to calculate the net decommissioning costs for the Facility as outlined in the plan. Cost estimates will be recalculated every five years over the life of the Facility. This calculation will include the total cost estimate for implementing the decommissioning plan, accounting for any unanticipated contingencies and estimates of salvage value of the Facility components. At least three years prior to the earlier of the termination of any Facility Power Purchase Agreement or the end of the operational life of the Facility, Juliet will post and maintain a surety bond or similar financial assurance instrument in that amount for the removal of the Facility. If a subsequent calculation of the decommissioning cost increases or decreases, the financial assurance instrument will be increased to a higher amount.

## Decommissioning Cost Estimate

Decommissioning costs will be detailed in a format similar to Table 1 below, including labor and material expenses for removal of solar modules, tracking systems, steel posts, transformers and inverters, access roads, perimeter fencing, and cabling (NYSERDA, 2020). Labor will be calculated based on full-time equivalent staff. Restoration activities will include topsoil replacement, seeding, and the overall restoration of land. The below cost estimate for a 2 MW Facility is provided as an example. Prior to construction, Juliet will engage an independent engineer to calculate net decommissioning costs for the final Facility design.

**Table 1. Example of Decommissioning Costs for 2 MW Project**

Task	Estimated Cost
Remove Rack Wiring	\$ 2,459
Remove Panels	\$ 2,450
Dismantle Racks	\$ 12,350

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Remove Electrical Equipment	\$ 1,850
Breakup and Remove Concrete Pads or Ballasts	\$ 1,500
Remove Racks	\$ 7,800
Remove Cable	\$ 6,500
Remove Ground Screws and Power Poles	\$ 13,850
Remove Fence	\$ 4,950
Grading	\$ 4,000
Seed Disturbed Area	\$ 250
Truck to Recycling Center	\$ 2,250
<b>Current Total</b>	<b>\$ 60,200</b>
<b>Total After 20 Years (2.5% inflation rate)</b>	<b>\$ 98,900</b>

## References

NYSERDA. (2020). Solar Guidebook for Local Governments, Decommissioning Solar Panel Systems. Albany: NYSERDA.

**This foregoing document was electronically filed with the Public Utilities**

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Summary: Application Exhibit K - Decommissioning Plan electronically filed by Teresa Orahoad on behalf of Dylan F. Borchers