

# **DECOMMISSIONING AND SITE RESTORATION PLAN**

## **Jordanville Wind Project**

### **Town of Warren**

This Decommissioning and Site Restoration Plan (this “Decommissioning Plan”) has been proposed to the Town of Warren (the “Town”) to satisfy the requirements set forth in the Town of Warren Wind Energy Facilities Law, as amended (the “Siting Law”), as those requirements relate to the portion of the Jordanville Wind Farm Power Project (the “Project”) located within the Town and shall be binding on each successor and assign of Jordanville Wind, LLC (“Jordanville”). A substantially identical Decommissioning and Site Restoration Plan has been developed for the Town of Stark to satisfy the requirements set forth in the Town of Stark Wind Energy Facilities Law, as amended, as those requirements relate to the portion of the Project within the Town.

This decommissioning plan is intended to be submitted to each Town in the form of an agreement for signature by the authorized parties, accompanied by a bonafide estimate of decommissioning costs approved by a licensed engineer for Town approval and the necessary documentation to secure the necessary Letters of Credit (“LOC(s)”).

The proposed LOC provides more financial security to each Town and access to full decommissioning funds five years earlier than the existing wind energy facility law in both Towns. Acceptance of the proposed agreement will require a variance to be granted by each Town Board. A request for a variance will be transmitted by Jordanville.

The purpose of this Decommissioning Plan is to ensure that the wind power facility and its related structures within the Town are properly removed, if necessary, at the end of their useful life and that the surrounding soil and vegetation is restored to original site conditions. Moreover, this Decommissioning Plan also ensures that sufficient financial resources are available to undertake proper decommissioning of the portion of the Project within the Town. This Decommissioning Plan contains three components: (1) the manner of equipment removal and site restoration; (2) the estimated costs of decommissioning; and (3) the timing and amount of the security in the form of standby LOC(s) to ensure the availability of funds to cover the estimated decommissioning costs.

### **Facility Dismantling, Removal, Repowering, and Site Restoration**

The predicted useful life of a modern wind turbine generator (“WTG”) is at least twenty years. Project financing and planning is based on this predicted life span. At the end of the WTGs useful life, the Project will be either repowered or decommissioned. Repowering the facility typically involves replacing the existing WTGs with new turbines or turbine components that are more efficient, thereby extending the useful life of the Project. Some of the steps involved in decommissioning a facility may also be part of a repowering to the extent that the existing towers and foundations are not sufficiently engineered to accommodate the replacement WTGs. However, in order to ensure that the Decommissioning Cost Estimate (as defined below) captures all the potential costs of dismantling and removing

equipment and restoring the site to its original condition, it is presumed that the Project will be entirely decommissioned at one time and not repowered. If the site is repowered, the Town will require a new project permit application.

The decommissioning process for the Project would be as follows:

1. Jordanville will hire a Town approved environmental monitor at the expense of Jordanville.
2. Construct temporary roads and make necessary improvements, if necessary, to Town roads in order to mobilize cranes to the site for each wind turbine.
3. Dismantle and remove the rotor, nacelle and towers and transport entire WTG off site.
4. Bring in an excavator to clear the soil around the center of each foundation. Then, with an air hammer or comparable equipment, the concrete foundations are removed to 3 feet below the surrounding grade.
5. All the metal and cable are cut off below 3 feet at each foundation site so that there is nothing left in the ground above about 3 feet below grade level. Where possible, the metal and cable items shall be separated and recycled. Collection cables will generally be retired in place.
6. The holes will be backfilled with the soil that was excavated and the foundation areas regraded as close as reasonably possible to the original ground contours. These areas will be returned as close as reasonably possible to pre-construction conditions suitable for agricultural use. The project will adhere to New York State Department of Agriculture & Markets Guidelines for Agricultural Mitigation for Wind Power Projects, which will apply to all agricultural lands impacted by the project. Pre-existing conditions of all Town roads to be used in decommissioning will be documented prior to decommissioning.
7. All access roads to the wind turbines will be removed and regraded as close as reasonably possible to the original ground contours, excluding roads that the landowners wish to retain. Removed road areas would be returned as close as reasonably possible to pre-construction conditions suitable for agricultural use if such was the pre-existing condition. For the purposes of the Decommissioning Cost Estimate, it is assumed all new site access roads added by the Project will be removed. Pre-existing conditions of all Town roads to be used in decommissioning will be documented prior to decommissioning.
8. Additionally, any roads damaged during the decommissioning process will be repaired to pre-existing conditions, reasonable wear and tear excepted, to correct any damage resulting from the decommissioning activities.

9. Transformer and all other substation equipment will be removed from the site. Concrete foundations will be removed to a depth of three feet, including gravel and fencing. The area will be regraded to match the surrounding ground contours. Again, this area shall be returned as close as reasonably possible to pre-construction conditions.

In addition to the foregoing, all decommissioned gearboxes, transformers, and hydraulic systems shall be drained of fluids, which shall be put into appropriate containers before dismantling, and shall be transported and recycled or disposed of in accordance with all local, state and federal environmental regulations.

### **Estimated Costs for Decommissioning and Site Restoration**

The following is an estimate of the cost (the “Decommissioning Cost Estimate”) of dismantling the wind power facility and returning the site within the Town, as close as reasonably possible, to pre-construction condition suitable for agricultural use. The estimate is based on the decommissioning approach outlined above and is conservatively based on the removal of 68 2.0 MW WTGs in the total Project (up to 34 WTGs located within the Town) with 78-M towers and a 87-M rotor diameter, the site roads and the meteorological towers.

#### Scope

Based on the following assumptions, the decommissioning scope is:

- The WTGs shall be dismantled in a manner to allow for refurbishment and resale of each component.
- The cost to transport the WTG equipment off-site.
- Up to 68 WTGs will be decommissioned (up to 34 WTGs located within the Town).
- 2 meteorological towers will be decommissioned (2 meteorological towers located within the Town).
- Approximately 19 lineal miles of access roads will be decommissioned (approximately 10 lineal miles of access roads located within the Town).
- A substation will also need to be dismantled (located in Stark).
- The 230 kV line will be deactivated and removed (located in Stark).

Total estimate of decommissioning per WTG is about \$15,870.06 per turbine in current dollars. The final LOC value will be based on a NYS Licensed Engineer’s cost estimate, the likely expenditures necessary to accomplish the above task and those costs reasonably related to the removal of wind turbines. This figure averages the costs of

decommissioning the 230 kV line, the substation, the 2 meteorological towers, and the access roads into each turbine. Escalating this amount out twenty years at a 3 percent inflation rate produces a year 20 requirement of approximately \$27,828.25 per turbine or a total decommissioning cost of \$1,892,320.00. \$919,503.00 million of this cost has been reasonably allocated to the Town, which amount is the “Decommissioning Cost Estimate” for purposes of this Decommissioning Plan. This figure accounts for a portion of the additional salvage value related to the disposal of the WTGs. Jordanville shall adjust the Decommissioning Cost Estimate every five years based upon the increase, if any, in the Consumer Price Index-Urban Consumers, as published by the United States Department of Labor, Bureau of Labor Statistics. The cost of labor and materials associated with demolition will be based on RS Means or other construction cost data resources supplied by NYS Engineer.

### **Financial Assurance to Accomplish Decommissioning**

The Project shall assure the availability of funds to cover the Decommissioning Cost Estimate. In order to provide such assurance before the end of the useful life of the equipment, Jordanville agrees to deliver to the Town by the start of construction of the Project one or more irrevocable, standby letter(s) of credit (the “LOC(s)”) with an aggregate initial face amount equal to 10% of the Decommissioning Cost Estimate, which LOC shall be issued for the benefit of the Town substantially in the form set forth Exhibit A by a U.S. commercial bank or foreign bank with a U.S. branch, with such bank having a credit rating of at least A- from Standard & Poor’s Rating Group or A3 from Moody’s Investor Services, Inc. The required face amount of the LOC(s) shall increase annually by equal amounts in each year, starting with the first anniversary of commercial operation of the Project and ending at the fifteenth anniversary of such date, so that the required aggregate face amount of the LOC(s) to be maintained with the Town will be equal at the end of the fifteen year period to the full Decommissioning Cost Estimate. Jordanville agrees to cause to be maintained with LOC(s) having an aggregate face amount available for drawing at the applicable time equal to the applicable required face amount of such LOC(s). The drawings under the LOC(s) up to the full face amount thereof at the time of any such drawing shall be available to the Town in the event of Jordanville’s failure to perform its decommissioning obligations in accordance with the above-described Decommissioning Plan or any Limited Decommissioning Plan (as hereinafter defined) with respect to any of the WTGs or other windpower facilities in the Project located within the Town. The LOC(s) shall each name the Town as the beneficiary and provide that, in the event of Jordanville’s failure to perform its decommissioning obligations in accordance with the above-described Decommissioning Plan or any Limited Decommissioning Plan, the Town may draw under the LOC(s) by delivery to the issuer(s) thereof one or more sight drafts, together with certificate(s) of the Town stating that Jordanville has failed to perform its decommissioning obligations within the Town in accordance with the above-described Decommissioning Plan or any Limited Decommissioning Plan within twelve (12) months following the earlier of the end of the Project life or facility abandonment as provided in this Decommissioning Plan (or, in the case of a Limited Decommissioning Plan, the end of the WTG life or WTG abandonment) and monies in the amount of the sight draft are required by the Town for the purpose of

performing such decommissioning obligations if such decommissioning obligations are not performed by Jordanville.

Jordanville and the Town agree that the Town shall be entitled to draw upon the LOC(s) in the following manner. In the event that the Town determines that the Project or one or more individual WTGs that is or are part of the Project within the Town has or have reached the end of its or their respective useful lives or has or have been abandoned, as evidenced by the failure of Jordanville to operate and generate electricity for a period of one year from the Project or for a period of 18 months in the case of any individual WTG; *provided*, that such 18-month period shall be extended on a day-for-day basis for any day after such WTG ceases to generate electricity if Jordanville's efforts to acquire necessary parts, equipment or workmen required to return any such WTG to service or to effect the necessary repairs to return any such WTG to service have been interrupted or delayed by any event(s) or circumstance(s) beyond the reasonable control of Jordanville, including without limitation, any shortage of, or delay in delivery of, equipment or parts, any failure of any third party to perform on a timely basis its obligations with respect to the delivery of equipment or parts or the making of any such repairs, any failure or disruption of service on the Project's collection system or the transmission system to which the Project is interconnected or any other event or circumstance that would be considered an event of *force majeure* under applicable law affecting Jordanville's ability to return any such WTG to service (any such event or circumstance, a "Delay Event"). The Town may deliver written notice of such determination to Jordanville (an "Abandonment Notice"). An annual report showing the last time each WTG produced electricity, will be produced for the Town as a basis for understanding the operation status of the Project.

In the event that, within thirty (30) days following the confirmed receipt of such Abandonment Notice by Jordanville, Jordanville has either (1) confirmed in writing the abandonment or termination of useful life of the Project or such WTG or WTGs, as the case may be, or (2) failed to provide to the Town a reasonable plan that demonstrates that the Project or such WTG or WTGs, as the case may be, has not or have not been abandoned or has not or have not reached the end of the Project's or such WTG's or WTGs', as the case may be, respective useful lives and will be returned to service within six (6) months (unless delayed by any Delay Event(s)), the Town may give Jordanville written notice that the Project or such WTG or WTGs, as the case may be, has or have been deemed to be subject to decommissioning in accordance with the terms of the Siting Law (the date of any such notice being a "Decommissioning Trigger Date"). Within twelve (12) months of such date (the "Decommissioning Period"), Jordanville shall be required to complete the decommissioning of the Project in accordance with the requirements of the Decommissioning Plan or such WTG or WTGs, as the case may be, as hereinafter provided. Notwithstanding any other provisions of this Decommissioning Plan to the contrary, if such notice is only with respect to one or more WTGs but less than all of the Project, Jordanville shall only be required to complete the decommissioning of the applicable WTG or WTGs. If such determination is so made with respect to any such WTG or WTGs, then Jordanville shall be required to dismantle the applicable WTG or WTGs and transport the applicable WTG equipment off-site (such actions, a "Limited Decommissioning Plan"). If Jordanville shall have failed to have completed the decommissioning of the Project or such WTG or WTGs in accordance with the

Decommissioning Plan or the Limited Decommissioning Plan, as the case may be, by the end of the Decommissioning Period, the Town may engage contractor(s) or subcontractor(s) to undertake the decommissioning of the Project or such WTG or WTGs in accordance with the Decommissioning Plan or the Limited Decommissioning Plan, as the case may be, and may draw upon the LOC(s) in the manner set forth above such amounts that shall become due and payable to such contractor(s) or subcontractor(s) pursuant to the terms and conditions or any work order or other agreement related to the decommissioning of the Project or the Limited Decommissioning Plan, as the case may be. Notwithstanding anything to the contrary set forth herein, if the Town is required to expend any funds for decommissioning, after consultation with Jordanville, to any contractor(s) or subcontractor(s) prior to any draw upon the LOC(s), such expense shall be, the responsibility of Jordanville, which shall fully reimburse the Town.

In the event that Jordanville shall notify the Town that it has completed any required decommissioning of the portion of the Project located within the Town in accordance with the Decommissioning Plan or the Limited Decommissioning Plan, as the case may be, on or before the end of the Decommissioning Period, the Town hereby agrees that Jordanville shall be entitled to reduce or eliminate the LOC(s) in the amount of decommissioning costs set forth in the Decommissioning Plan allocable to the portion of the Project so decommissioned by Jordanville. For purposes of this Decommissioning Plan or any Limited Decommissioning Plan, "completion" of the decommissioning shall mean that the Town's representative has determined that the decommissioning in question has been completed in accordance with the Decommissioning Plan or such Limited Decommissioning Plan. Costs borne by the Town to retain an environmental monitor for services related to decommissioning will be paid by Jordanville.

Jordanville shall provide for the right of entry by the Town onto the site of the Project, subject to the delivery of reasonable prior notice, for the purposes of effecting or completing any required decommissioning under this Decommissioning Plan or any Limited Decommissioning Plan in the event that Jordanville fails to perform its obligations under the Decommissioning Plan or such Limited Decommissioning Plan. In addition, upon any such failure by Jordanville, the Town shall be entitled to seek injunctive relief to effect or complete decommissioning, as well as to seek reimbursement from Jordanville or its successors for any decommissioning costs in excess of the outstanding face amount of the LOC(s) and to file a lien against any leasehold or other real property interests of Jordanville or its successors for the amount of the excess, and to take all steps allowed by law to enforce said lien. Jordanville and its successors and assigns agree that they shall be responsible for any decommissioning costs in excess of the face amounts of the LOC(s) maintained by Jordanville with the Town.