



Cassadaga Wind Project

Case No. 14-F-0490

1001.29 Exhibit 29

Site Restoration and Decommissioning

EXHIBIT 29 SITE RESTORATION AND DECOMMISSIONING

(a) Performance Criteria

Performance criteria during decommissioning and associated restoration is generally based on the Applicant's commitment to use existing infrastructure (e.g., access roads) during such activities. Therefore, no new environmental impacts are anticipated during decommissioning and restoration.

(b) Decommissioning and Restoration Plan

Megawatt-scale wind turbine generators typically have a life expectancy of 20 to 25 years. The current trend in the wind energy industry has been to replace or "re-power" older wind energy projects by upgrading older equipment with more efficient turbines. Performance criteria applicable to decommissioning would also be applicable to re-powering (please see discussion of performance criteria above in Exhibit 29(a)).

However, if not upgraded or if the turbines are non-operational for an extended period of time (such that there is no expectation of their returning to operation), they will be decommissioned, in accordance with the Decommissioning Plan (attached as Appendix EEE). This Plan will be filed separately under confidential cover, and includes the following provisions:

- Decommissioning would be triggered if a wind turbine is non-operational for over two years, unless otherwise agreed to by the Towns and DPS staff. Please see performance criteria for decommissioning and restoration above in Exhibit 29(a).
- All above-ground structures, including turbines, blades, nacelles, towers, transformers, above-ground collection cables and poles, permanent meteorological towers, and the collection substation, will be removed. The interconnection substation will not be removed during decommissioning, because it will be owned and operated by National Grid following its construction. Foundations and collection lines buried above a depth of 36 inches in non-agricultural lands and 48 inches in agricultural lands will be removed, but components buried lower than these depths will remain in place. The Applicant is not obligated to leave any components in place, and will only consider such action so long as it does not violate any permits or legal requirements. Upon request of the landowner, the Applicant may consider allowing access roads to remain in place. Written approval by the landowner will be obtained for any access roads to remain in place. Final removal of all machinery, equipment, and all other materials related to decommissioning activities is to be completed within one year of decommissioning initiation.

- Ground disturbance during decommissioning will be minimized to the extent practicable and the site will be restored to its original ground contours to the extent practicable. Soils stockpiled during site restoration will be used in the restoration and not transported off site. Vegetation will be re-established using a native seed mix or, in agricultural areas, in coordination with the landowner to allow desired crop to be planted. The Applicant will not be responsible for planting crops following site restoration but may plant a temporary seed mix in agricultural areas to be planted with crops.
- The Applicant will provide written notification to the Towns two weeks prior to the commencement of site restoration following decommissioning activities. In that notification the Applicant shall provide a timetable to be approved by the Town(s) prior to site restoration activities commencing. The Applicant will obtain any federal, state or local permits required for site restoration prior to decommissioning activities commencing.
- The Applicant will post and maintain financial assurance in the amount of the net decommissioning costs. The decommissioning estimate will be prepared by a qualified independent engineer licensed to practice engineering in the state of New York. The decommissioning estimate will be prepared on a per-turbine basis and submitted for DPS Staff and Town review to ensure consistency with the methodology approved in the Article 10 certificate. The estimate will be based on the turbines selected for the Facility and the exact number of turbines as well as the length/number of other Facility components (access road, collection line, etc.). To estimate scrap values, the engineer shall review and use current scrap commodity prices and disposal service rates. For resale value, the most recent estimate readily obtained of turbine components value shall be considered. The resale value shall also consider the age of components. Those components that are considered for resale shall be subtracted from any scrap value calculations included in the decommissioning estimate. To estimate the total cost of decommissioning, mobilization costs to complete site decommissioning shall be estimated. This would include hard costs such as crane mobilizations and other equipment to be used as well as soft costs such as project management and obtaining the necessary permits to complete decommissioning and site restoration. The total cost of decommissioning shall also account for an estimate of the time to disassemble each turbine and the collection substation as well as other associated Facility components. In order to be conservative, it will be assumed that all Facility components that could remain at landowner discretion (i.e., access roads) will be removed. However, Facility components buried lower than 36 inches in non-agricultural lands and 48 inches in agricultural lands will not be included in the total decommissioning cost. Decommissioning removal and transport costs shall also be taken into account. Lastly, the decommissioning cost shall include the costs to complete site restoration, which should take into account the total area that must be restored and seed mix costs to re-vegetate the disturbed ground.
- The first decommissioning estimate shall be provided prior to Facility construction, the second estimate after one year of Facility operation, and subsequent estimates every fifth year thereafter. Inflation shall be

considered when updating the decommissioning costs after one year of Facility operation and every fifth year thereafter.

- The Applicant plans to enter into Road Use Agreements with the Towns in which it plans to use Town roads for delivery of turbine components. The provisions of the Road Use Agreements will also apply to the decommissioning of the Facility in order to ensure that roads are adequately restored to their condition preceding decommissioning following decommissioning activities.
- The Applicant will post and maintain financial assurance in the amount of the net decommissioning costs. After the first year of operation, an independent and registered engineer, licensed to practice engineering in the state of New York, will estimate both the total cost of decommissioning and the net decommissioning costs. The net decommissioning costs is the total cost of decommissioning less the salvage value of the equipment and/or re-sale value. This per-turbine estimate (the net decommissioning costs divided by the total number of turbines) will be submitted for DPS Staff and for Town review before construction, after one year of Facility operation and every fifth year thereafter. If the total cost of decommissioning exceeds the salvage value of the equipment and/or re-sale value, the Applicant will post and maintain financial assurance in an amount equal to the net decommissioning cost within 2 months. Financial assurance may be in the form of a letter of credit, a bond, escrow account, a parent guarantee or other form as agreed to by the Towns and DPS Staff.
- When the Applicant posts the financial assurance, it will provide the Towns with clear instructions as to how they can access the financial assurance should the Applicant violate the provisions of the Decommissioning Plan. For example, if the financial assurance was in the form of a letter of credit, the Applicant would make the Towns a beneficiary of the letter of credit and provide instructions as to how they could access the funds in the letter of credit if needed.
- The Decommissioning Plan will be binding upon the Applicant, or any of its successors, assigns, or heirs.
- The Towns in which decommissioning activities have occurred will have access to the Facility, pursuant to reasonable notice to the Applicant, to inspect the completed decommissioning activities.
- As stated above, final removal of all machinery, equipment, and all other materials related to decommissioning activities is to be completed within one year of decommissioning initiation, unless otherwise agreed to by the Town(s) and DPS staff.

(c) Description of Decommissioning/Restoration Agreements Between Applicant and Landowners

A short section of collection line will be located on State Forest land owned by NYSDEC. Decommissioning for this section of collection system is to be addressed in a lease agreement that has not yet been finalized. All other Facility components will be located on private land under lease agreement with the landowners, and all leases with private

landowners contain a provision on decommissioning. Although the specific terms of these lease agreements are confidential, decommissioning will involve the removal of all above and below ground Facility components to a depth of at least three feet. Information on the method and schedule for updating the cost of decommissioning and restoration, the method of ensuring funds will be available for decommissioning and restoration, and the method by which the Facility will be decommissioned and the site restored is provided in 1001.29(b) above.

(d) Nuclear Power Facilities

This section is not applicable and therefore is not addressed in this Article 10 Application.