Bluestone Wind Project

Case No. 16-F-0559

1001.3 Exhibit 3

Location of Facilities

EXHIBIT 3 LOCATION OF FACILITIES

(a) Topographic Maps

Figure 3-1 shows the location of the components of the major electric generation and interconnection facilities associated with the proposed Bluestone Wind Energy Facility, including the wind turbines, access roads, electrical collection lines (all of which will be buried), collection substation (which includes battery storage), point of interconnection (POI) substation, overhead transmission line (non-Article VII), permanent meteorological towers, operation and maintenance (O&M) building, concrete batch plant, and laydown area. These components, collectively referred to as the "Facility," are mapped on U.S. Geological Survey (USGS) 1:24,000 topographic quadrangles printed at full-scale via topographic tile cache base map server. This map service combines the most current data (Boundaries, Elevation, Geographic Names, Hydrography, Land Cover, Structures, Transportation, and other themes) that make up The National Map (USGS, 2017). The National Map is a collaborative effort between the USGS and other federal, state, and local partners to improve and deliver topographic information for the United States (USGS, 2018). The USGS Topo Map Service is designed to provide a seamless view of the data in a geographic information system (GIS) accessible format and depicts information consistent with the USGS 7.5-minute (1:24,000) quadrangle topographic maps at large scales (USGS, 2017).

(1) Proposed Major Electric Generating Facility Locations

For the purposes of this Article 10 Application, the Facility Site is defined as those parcels currently under or being pursued for lease (or other real property agreement) by the Applicant for the location of all Facility components. Figure 3-1 depicts the location of all Facility components within the Facility Site displayed at a scale of 1:24,000, including:

- Wind turbines
- Access roads
- Electrical collection lines[1]
- Collection substation[2]
- POI substation
- Overhead transmission line (non-Article VII)[3]
- Permanent meteorological tower(s)
- O&M building[4]

[1] All electrical collection lines will be buried.

[2] Battery storage will be housed within the footprint of the collection substation.

[3] Approximately 200 feet of overhead transmission line will connect the collection and POI substations.

[4] This includes ancillary features such as a maintenance shed, parking lot, etc.

- Concrete batch plant[5]
- Laydown area[5]

Figure 3-2 separately depicts the collection substation, POI substation, the overhead transmission line, and the incoming collection line. As depicted in Figure 3-2, the Facility's collection substation will be constructed adjacent to the POI substation. Permanent stormwater features (e.g., large detention basins) will be utilized during operation of the Facility. See the Stormwater Pollution Prevention Plan (SWPPP) (Appendix KK) for a full discussion of these features and where they will be located.

(2) Interconnection Location

All Facility components, including the interconnection facilities, will be located within the defined Facility Site and therefore are mapped in Figures 3-1 and 3-2 as indicated in Section (a)(1), above. There are no municipal interconnections (i.e., potable water mains, wastewater conveyances, etc.) within the Facility Site.

(3) Location of Ancillary Features

Based on all studies and analyses conducted to date, the only known off-site ancillary features associated with the Facility are temporary public road improvements, which are depicted in Figure 3-3.

(4) Location of Article VII Transmission Lines Not Subject to Article 10

The Facility does not include any components (i.e., transmission lines) that are regulated under Article VII of the New York Public Service Law. As a result, this section is not applicable to the Facility. See Section (a)(1) above for information related to the Facility's interconnection.

(5) Study Area

The Facility has been the subject of numerous studies in support of this Article 10 Application. A single, universal study area has not been utilized for all studies/analyses. Rather, the various studies have applied resource-specific study areas, which are described briefly below along with a reference to the exhibit in which more information concerning the study area is provided.[6]

[5] The batch concrete plant and laydown area will be collocated with the O&M building.

[6] Land outside New York State was excluded from study areas, unless otherwise noted, as this land would fall outside the scope of New York State law and the definitions provided in NY PSL § 160(1); see also 16 NYCRR § 1000.2(an) with respect to "stakeholders." Including this land could introduce confusion regarding the Board's jurisdiction, for example, to impose conditions in other jurisdictions. However, the public

- Land Use (see Exhibit 4 for additional detail): Various aspects of land use (e.g., zoning, land use classifications, and existing utilities) were characterized within a 5-mile radius of Facility components. In addition, a detailed review of land use was conducted within the Facility Site.
- Shadow Flicker Study Area (see Exhibits 15 and 24 for additional detail): The potential for impacts resulting from shadow flicker were assessed within a 10-rotor diameter (1,500 meter) radius of any proposed turbine location.
- Noise Study Area (see Exhibit 19 for additional detail): The potential for noise impacts resulting from the construction and operation of the proposed Facility was assessed for all sensitive receptors and participating residences located within one mile of any proposed turbine location.
- Archaeological Area of Potential Effect (see Exhibit 20 for additional detail): The Archaeological Area of Potential Effect was defined as the extent of potential soil disturbance for all Facility components, except for access roads, for which the maximum extent of potential vegetation disturbance was assessed.
- Historic Architectural Survey Area (see Exhibit 20 for additional detail): Potential impacts to architectural resources resulting from the construction and operation of the proposed Facility were assessed within a 5-mile radius of the Facility Site.
- Bird and Bat Surveys (see Exhibit 22 for additional detail): A variety of survey parameters were implemented to support bird and bat studies. The specifics were study dependent. Transects were utilized for spring breeding bird surveys (18 total were surveyed), and radius plots were utilized for raptor migration surveys (12 in the first year of data collection and 24 in the second year).
- Wetland and Stream Study Area (see Exhibits 22 and 23 for additional detail): Wetland and stream delineations were conducted for all areas within 500' of potential land disturbances associated with Facility construction (see Figure 22-2).
- Visual Study Area (see Exhibit 24 for additional detail): The study area utilized to conduct visual impact assessments for the proposed Facility was defined as a 10-mile radius around the Facility Site.
- Transportation Study Area (see Exhibit 25 for additional detail): Transportation impacts resulting from the construction and operation of the proposed Facility were assessed for all proposed transportation routes, beginning where these routes exit Interstate 86 and ending at the Facility access roads.
- Communications Study Area (see Exhibit 26 for additional detail): The baseline study area used to assess the potential impact of the Facility on communications was defined as the area within a 2-mile radius of

involvement program includes methods for broadly disseminating information without regard to State jurisdiction (e.g., providing information regarding the Project via the internet, providing public notices to newspapers with circulation in Pennsylvania, etc.) and going forward, any interested Pennsylvania residents who wish to receive Project updates will be encouraged to join the Project mailing list.

Facility components. This baseline study area was extended as necessary for some communication types (e.g., radio, television, microwave, radar, etc.).[7]

- Environmental Justice Study Area (see Exhibit 28 for additional detail): The study area utilized to assess the potential impact of the Facility on environmental justice (EJ) communities was defined as a 0.5-mile radius around Facility components, consistent with the criteria set forth in 6 NYCRR § 487.4.

(b) Municipal Boundary Maps

Figure 3-3 depicts the location of the proposed Facility, the Facility Site, and the location of temporary road improvements in relation to village, town, county, and school district boundaries. These locational relationships are described in Section (c) below. Consistent with the discussion in that section, the mapping does not depict alternative locations. The latitude, longitude, and ground surface elevation of all proposed turbines are detailed in Table 3-1 below.

Table 3-1. Latitude, Longitude, and Elevation of All Proposed Turbines

Turbine Name	Latitude	Longitude	Elevation (feet)
T1	42° 6' 47.931"" N	75° 33' 14.935"" W	1829
T3	42° 6' 3.908"" N	75° 32' 39.460"" W	1772
T4	42° 6' 19.527"" N	75° 33' 9.142"" W	1849
T5	42° 4' 57.907"" N	75° 33' 37.438"" W	1842
T6	42° 4' 55.021"" N	75° 33' 57.216"" W	1840
T7	42° 4' 23.995"" N	75° 34' 3.207"" W	1905
T10	42° 4' 26.259"" N	75° 32' 17.955"" W	1722
T11	42° 4' 40.765"" N	75° 31' 47.001"" W	1704
T13	42° 6' 19.246"" N	75° 31' 50.521"" W	1834
T14	42° 6' 33.711"" N	75° 30' 38.273"" W	1976
T15	42° 6' 7.167"" N	75° 30' 43.197"" W	1919
T16	42° 5' 29.047"" N	75° 30' 18.949"" W	1939
T19	42° 5' 52.951"" N	75° 30' 25.142"" W	1828
T20	42° 5' 58.918"" N	75° 29' 39.654"" W	1931
T21	42° 6' 16.158"" N	75° 30' 26.245"" W	2009
T22	42° 6' 16.284"" N	75° 29' 50.151"" W	2011
T23	42° 6' 49.281"" N	75° 30' 44.102"" W	1913
T24	42° 5' 34.650"" N	75° 29' 20.616"" W	1811
T25	42° 5' 17.121"" N	75° 28' 7.832"" W	1790
T26	42° 5' 52.890"" N	75° 28' 1.707"" W	1927
T27	42° 6' 53.537"" N	75° 27' 6.310"" W	1977
T28	42° 6' 46.077"" N	75° 27' 22.764"" W	1833

[7] Note, some of these study areas extended into Pennsylvania.

Turbine Name	Latitude	Longitude	Elevation (feet)
T29	42° 6' 43.331"" N	75° 27' 50.173"" W	1878
T30	42° 6' 34.698"" N	75° 26' 43.771"" W	1857
T31	42° 6' 11.215"" N	75° 27' 24.647"" W	1944
T32	42° 7' 6.758"" N	75° 27' 15.084"" W	1912
T33	42° 5' 56.087"" N	75° 27' 36.540"" W	1816
T34	42° 5' 24.158"" N	75° 27' 9.360"" W	1832
T35	42° 4' 58.414"" N	75° 26' 37.684"" W	1841
T36	42° 6' 40.342"" N	75° 32' 10.015"" W	1822
T37	42° 4' 10.466"" N	75° 33' 40.760"" W	1809
T38	42° 4' 18.802"" N	75° 31' 20.535"" W	1748
T40	42° 5' 43.097"" N	75° 27' 8.937"" W	1924

(c) Description of Proposed Facility Locations

The Facility Site is in Broome County within the Towns of Sanford and Windsor. The Facility Site is also located within the Deposit Central School District and Windsor Central School District (USCB, 2016). See Table 3-2 for a summary of the number of Facility turbines that are proposed within each of these jurisdictions. The Applicant is not aware of any other applicable municipal boundaries, taxing jurisdictions, or designated neighborhoods or designated community districts with jurisdiction intersecting the Facility Site.

Table 3-2. Number of Turbines by Municipal Boundary and Taxing Jurisdiction

Municipal Boundary/Taxing Jurisdiction		Number of Turbines
County	Broome	33
Town	Sanford	29
	Windsor	4
School District	Deposit Central	27
	Windsor Central	7

Note, existing disturbances will be utilized wherever practicable in siting Facility components. For example, linear Facility components (e.g., access roads, electrical collection lines) will be sited on or adjacent to existing logging roads, farming roads, other access roads, or natural gas pipelines in many locations. See Exhibit 12(c) for a full discussion of how the Applicant will avoid interference with existing utility systems.

As shown in Figure 3-3, the Villages of Deposit and Windsor are proximal to, but do overlap, the Facility Site (NYSGPO, 2018). The Facility Site is located to the north and west of the Village of Deposit, with the nearest turbine located

approximately 1 mile from the Village boundary. The Village of Windsor is located to the west of the Facility Site, with the nearest turbine located approximately 3.2 miles from the Village boundary.

With respect to reasonable and available alternative location sites, note that the Applicant, as a private facility applicant, does not have (and does not anticipate having) eminent domain authority. Exhibit 9 provides a full discussion of alternatives and the process by which the proposed Facility Site was selected. Figure 9-1 depicts the proposed Facility layout and the alternative layout discussed in Exhibit 9, Section (c)(4).

REFERENCES

NYS GIS Program Office (NYSGPO). 2018. *NYS Civil Boundaries* [shapefile]. Available at: http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=927. (Downloaded April 19, 2018). Released April 2018.

United States Census Bureau (USCB). 2016. *Unified School Districts* [shapefile]. Available at: ftp://ftp2.census.gov/geo/tiger/TIGER2016/ (Downloaded July 26, 2017). Released August 19, 2016.

United States Geological Survey (USGS). 2017. *The National Map: USGS Topo (Map Server).* Available at: https://basemap.nationalmap.gov/arcgis/rest/services/USGSTopo/MapServer. (Accessed April 2018).

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