



## Baron Winds Project

Case No. 15-F-0122

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 Baron Winds Project including the turbines, access roads, electrical collection system, collection and point of interconnection (POI) substations, permanent meteorological towers, operation and maintenance (O&M) building, and laydown areas. 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 a topographic tile cache base map service. 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, 2017b). 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, 2017a). The USGS Topo Map Service is designed to provide a seamless view of 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, 2017b). Figure 3-1 has been created at a scale of 1:24,000.

### (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 interests) by the Applicant for the location of all Facility components. Figure 3-1 depicts the location of all Facility components within the Facility Site, including the following:

- wind turbines
- permanent meteorological towers
- access roads
- buried electrical collection
- overhead electrical collection
- O&M building. [Note: The location depicted on Figure 3-1 represents the preliminary location under consideration at the time of the Application. However, this location may change post-Certification.]
- laydown areas (including possible location of temporary concrete batch plant, if needed)
- POI substation
- collection substation

- alternate turbine locations. [Note: As described in Exhibit 9, one of the alternatives being evaluated is the use of taller turbines in the same location as those proposed and evaluated throughout this Application. Therefore, in relation to Figure 3-1, the taller turbines would be in the same location as those depicted with the “wind turbine” symbol.]

Figure 3-2 separately depicts the collection substation, POI substation and associated voltage of the collection line. As depicted on Figure 3-2, the Facility's collection substation will be constructed adjacent to an existing POI substation. Modifications will be made to the existing POI in order to accommodate the additional electricity generated by the Facility.

#### (2) Interconnection Location

All Facility components, including the interconnection facilities, will be located within the defined Facility Site and are mapped in Figure 3-1 and Figure 3-2 as indicated in Section (a)(1) above.

#### (3) Location of Ancillary Features

Based on all studies and analyses conducted to date, the only off-site ancillary features associated with the Facility are temporary road improvements as well as any staging areas as required by the Balance of Plant contractor/turbine manufacturer. These features are depicted on Figure 3-3.

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

The Facility does not include any components that are subject to Article VII of the New York Public Service Law. The Facility is not proposing a transmission line. 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.

- Land Use (see Exhibit 4 for additional detail): Various aspects of land use such as zoning, land use classification, and existing transmission facilities were characterized within a 5-mile radius of the Facility. In addition, a detailed review of land use was conducted for the Facility Site.
- Shadow Flicker (see Exhibits 15 and 24 for additional detail): The potential for impacts resulting from shadow flicker was assessed within a radius equal to 10 turbine rotor diameters (1,400 m) around each proposed turbine location.
- Noise (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 with the exception of access roads and spans of overhead collection line, for which the maximum extent of potential vegetation disturbance was assessed.
- 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 of which were dependent on the particular study (e.g., 34 survey locations were utilized for fall migration surveys, 18 transects were utilized for spring breeding bird surveys, two anabat detectors were deployed at different heights in the on-site meteorological tower for acoustic bat surveys).
- Wetland/Stream Survey Area (see Exhibits 22 and 23 for additional detail): The study area utilized to conduct wetland and stream investigations was defined as a 200-foot wide corridor centered on linear Facility components (e.g., access roads, buried electrical interconnect, overhead transmission line), and within a 200-foot radius of turbines and other components such as permanent meteorological towers, staging areas, and the collection substation.
- 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 (see Exhibit 25 for additional detail): The study area utilized to assess potential impacts resulting from the transportation needs for the construction and operation of the proposed Facility was defined as those potential transportation routes beginning where the routes exit from Interstate 86 and ending at the Facility access roads.
- Communications (see Exhibit 26 for additional detail): The study area for communications facilities differs depending on the particular communications facility under review (radio, television, phone, radar, etc.).

- 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 half-mile radius around each of the Facility components, consistent with the criteria set forth in 6 NYCRR 487.4.
- Electric and Magnetic Fields Study Area (see Exhibit 35 for additional detail): The study area utilized to conduct electric and magnetic field calculations was defined as the right of way associated with overhead collection lines (100 feet) and underground collection lines (60 feet).

(b) Municipal Boundary Maps

Figure 3-3 depicts the location of the proposed Facility, the Facility Site, and the location of anticipated temporary road improvements in relation to village, town, county, and school district boundaries. The locational relationships are described in section (c) below.

(c) Description of Proposed Facility Locations

The Facility Site is located in Steuben County within the Towns of Cohocton, Dansville, Fremont, and Wayland. The Facility Site is also located within the Avoca Central School District, Hornell City School District, Wayland-Cohocton Central School District, and the Arkport Central School District (USCB, 2016). See Table 3-1 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 community districts with jurisdiction over the Facility Site.

**Table 3-1. Number of Turbines by Municipal Boundary and Taxing Jurisdiction**

Municipal Boundary/Taxing Jurisdiction	Number of Turbines
Steuben County	76
<b>Towns</b>	
Town of Cohocton	25
Town of Dansville	3
Town of Fremont	38
Town of Wayland	10
<b>School Districts</b>	
Avoca Central School District	6
Hornell City School District	7
Wayland-Cohocton Central School District	44
Arkport Central School District	19

Note that with respect to siting various Facility components, existing disturbances will be utilized wherever practicable. For instance, in many locations linear features of the Facility (e.g., access roads, collection lines) will be sited, in part, on agricultural farm roads or four-wheeler trails.

As shown in Figure 3-3, the Villages of Cohocton, Avoca, Wayland, North Hornell, and Arkport are relatively proximate to the Facility but do not overlap the Facility Site (NYSGPO, 2017). The Facility Site is located to the west and south of the Village of Cohocton, with the nearest turbine located approximately 0.5 miles from the Village boundary. The Village of Avoca is located to the east of the Facility Site, with the nearest turbine located approximately 4.6 miles from the Village boundary. The Village of Wayland is located to the north of the Facility Site, with the nearest turbine located approximately 3.8 miles from the Village boundary. The Village of North Hornell is located to the south and west of the Facility Site, with the nearest turbine located approximately 3.5 miles from the Village boundary. The Village of Arkport is located to the west of the Facility Site, with the nearest turbine located approximately 4.3 miles from the Village boundary.

With respect to reasonable and available alternative locations sites, note that the Applicant, as a private facility applicant, does not have (and does not anticipate having) eminent domain authority. Therefore, the identification and description of reasonably available alternative site locations to be addressed in the Article 10 Application will be limited to sites owned by or under contract/option to the Applicant. See Exhibit 9 for additional information.

## REFERENCES

NYS GIS Program Office (GPO). 2017. *NYS Civil Boundaries* [shapefile]. Available at: <http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=927> (Downloaded April 24, 2017).

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). 2017a. *The National Map: Introduction to The National Map*. Available at: <https://nationalmap.gov/about.html> (Accessed July 26, 2017).

USGS. 2017b. *The National Map: USGSTopoLarge (MapServer)*. Available at: <http://services.nationalmap.gov/arcgis/rest/services/USGSTopoLarge/MapServer> (Accessed July 26, 2017).