Mohawk Solar

Case No. 17-F-0182

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 Mohawk Solar Facility, including PV panel layout, access roads, electrical collection lines, collection and POI substation, and an O&M building. 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, 2018). 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, 2019). 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 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 displayed at a scale of 1:24,000 including:

- PV panels
- Access roads
- Buried electrical collection
- A short span of overhead transmission line (approximately 200 feet)
- POI substation
- Collection substation
- O&M building

Figure 3-2 separately depicts the collection substation, POI substation, and buried collection lines. As depicted in Figure 3-2, the Facility's collection substation will be constructed adjacent to the POI substation. Permanent stormwater features (e.g., dry swales, stormwater detention basins) will be utilized during operation of the Facility.

See the Stormwater Pollution Prevention Plan (SWPPP) for a full discussion of these features and where they will be located (see Appendix 21-B).

(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 3(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, there are no known off-site ancillary features (such as road improvements) associated with the Facility.

(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 (PSL). 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 and will be subject to a number of studies in support of the Article 10 Application. A single, universal study area will not be utilized for all studies/analyses. Rather, the various studies have 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 (e.g., zoning, land use classifications, and existing utilities) were characterized within a 2-mile radius of Facility components. In addition, a detailed review of land use and farmland viability was conducted within the Facility Site.
- Electric Systems Effects (see Exhibit 5 for additional detail): The potential for electrical system impacts resulting from Facility operation was assessed through a Systems Reliability Impact Study (SRIS) which will be filed under confidential cover.
- Sound Impact Study Area (see Exhibit 19 for additional detail): The potential for sound impacts resulting from the construction and operation of the proposed Facility was assessed within 1,500 feet of the Facility Site.
- Phase 1B Archaeological Survey (see Exhibit 20 for additional detail): The Phase 1B Archaeological Survey was conducted to determine whether archaeological sites are located in the areas that may be

affected by the proposed Facility. The survey focused on areas where significant ground disturbance would occur (e.g. inverter pads, access roads, proposed substation, staging areas that require grading and/or paving, etc.)

- 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.
- Historic Resources Effects Analysis (see Exhibit 20 for additional detail): The Facility's potential effect on sites listed or eligible for listing in the National Register of Historic Places were evaluated within a 5-mile study area.
- Bird and Raptor Surveys (see Exhibit 22 for additional detail): A variety of survey parameters were
 implemented to support bird and raptor studies. The specifics were study dependent. Transects were
 utilized for spring breeding bird surveys (15 total), while raptor surveying used driving transects (6 total),
 stationary point-counts (12 total), and 5-minute driving transect point-counts (18 total).
- Wetland and Stream Study Area (see Exhibits 22 and 23 for additional detail): Wetland and stream delineations were conducted for all parcels that host Facility components and within a 1,000-foot corridor centered on linear features (i.e. collection lines and access roads).
- 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 5-mile radius around the Facility Site.
- Route Evaluation Study Area (see Exhibit 25 for additional detail): Existing transportation conditions, probable local travel corridors, and proposed road improvements were evaluated around the Facility Site.
- 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
 Facility components. This baseline study area was extended as necessary for some communication types
 (e.g., radio, microwave, radar, etc.).
- Electric Magnetic Fields Study Area (see Exhibit 35 for additional detail): The study area extended 500 feet past the edge of either side of the right-of-way (ROW). Measurements occurred at five-foot intervals.
- (b) Municipal Boundary Maps

Figure 3-1 depicts the location of the proposed Facility and Facility Site with respect 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 panel arrays are detailed in Table 3-1 below.

Panel Array ID	Latitude	Longitude	Elevation (ft above mean sea level [amsl])
1A	42.8975	-74.6318	800
1B	42.8916	-74.6271	700
1C	42.8944	-74.6272	720
1D	42.8931	-74.6233	730
1E	42.8926	-74.6083	770
2A	42.9154	-74.6383	610
2B	42.9139	-74.6413	680
2C	42.9131	-74.6367	630
2D	42.9112	-74.6434	720
2E	42.9104	-74.6383	720
2F	42.9072	-74.6403	740
2G	42.9022	-74.6392	780
2H	42.8995	-74.6354	800
3A	42.9045	-74.6495	780
3B	42.9023	-74.648	770
3C	42.8992	-74.6566	810
3D	42.9007	-74.6515	800
3E	42.8981	-74.6534	820
3F	42.8962	-74.6528	810
3G	42.8983	-74.642	720
3Н	42.8954	-74.6506	810
31	42.8969	-74.6472	790
3J	42.8957	-74.6444	800
ЗК	42.8824	-74.662	810
3L	42.8844	-74.6601	800
4A	42.887	-74.6565	830
4B	42.8887	-74.6551	840
4C	42.8888	-74.6502	840
4D	42.8854	-74.6476	840
4E	42.8661	-74.6494	900

Table 3-1. Latitude, Longitude, and Surface Elevation at the Center of PV Array Sections.

Panel Array ID	Latitude	Longitude	Elevation (ft above mean sea level [amsl])
4F	42.868	-74.647	880
4G	42.8686	-74.6442	870
4H	42.8772	-74.6303	730
41	42.8754	-74.6254	710
4J	42.8776	-74.6172	750
4K	42.8798	-74.6102	670
4L	42.8848	-74.6113	670

(c) Description of Proposed Facility Locations

The Facility Site is in Montgomery County within the Towns of Canajoharie and Minden. The Facility Site is also located within the Canajoharie and Fort Plain Central School Districts. See Table 3-2 for a summary of Facility components within each of these jurisdictions. The Applicant is not aware of any other applicable municipal boundaries, taxing jurisdictions, designated neighborhoods, or designated community districts with jurisdiction intersecting the Facility Site.

 Table 3-2. Facility Components by Municipal Boundary and Taxing Jurisdiction

Municipal Boundary/Taxing Jurisdiction		Facility Components		
County	Montgomery	PV Array, collection lines, access roads, substations, O&M Facility		
Town	Canajoharie	PV Array, collection lines, access roads, collection substation, POI substation, O&M Facility		
	Minden	PV Array, collection lines, access roads		
School District	Fort Plain Central	PV Array, collection lines, access roads		
	Canajoharie Central	PV Array, collection lines, access roads, collection substation, POI substation, O&M Facility		

Note existing disturbances will be utilized wherever practicable in siting Facility Components. See Exhibit 12(c) for a full discussion of how the Applicant will avoid interference with existing utility systems.

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.

(d) Facility Shapefiles

Facility shapefiles are included as part of this Article 10 Applicant. These files show the proposed PV panel locations, access roads, collection lines, collection substation, POI switchyard, and O&M building.

REFERENCES:

United States Geological Survey (USGS). 2018. *The National Map: USGS Topo (Map Server)*. Available at: <u>https://basemap.nationalmap.gov/arcgis/rest/services/USGSTopo/MapServer</u>. (Accessed April 2019).

USGS. 2019. *The National Map: Introduction to The National Map.* Available at: <u>https://nationalmap.gov/about.html</u>. (Accessed April 2019).