



# **GARNET ENERGY CENTER**

**Case No. 20-F-0043**

**1001.3 Exhibit 3**

**Location of Facilities**

## Contents

Exhibit 3: Location of Facilities.....	1
3(a) Topographic Maps .....	2
(1) Location of Project Components.....	2
(2) Proposed Interconnection Locations.....	3
(3) Proposed Ancillary Features.....	3
(4) Proposed Electric Transmission Facility Subject to Article VII.....	3
(5) Project Study Areas .....	3
3(b) Maps of Project Area.....	4
3(c) Description of the Proposed Facility Location .....	5

## Figures

- Figure 3-1. Project Component Locations
- Figure 3-2. Geographic and Political Features

## **Exhibit 3: Location of Facilities**

This Exhibit will track the requirements of Final Stipulation 3, dated March 5, 2021 and therefore, the requirements of 16 New York Codes, Rules and Regulations (NYCRR) § 1001.3. This Exhibit contains maps, drawings, and explanations showing the proposed location of Project Components including the commercial-scale solar arrays, energy storage system, access roads, collection lines, on-Site laydown/staging areas, collection substation, and 345-kV switchyard. The Project Area totals 2,288.7 acres. The total area of the Limit of Disturbance (LOD) for the Project is approximately 1,199.8 acres, and the area inside all fences for the Project totals 1,053.7 acres. The proposed ancillary features, including the access roads, collection substation, proposed switchyard, energy storage system, and two interconnection lines of approximately 200 feet and 550 feet respectively, from the 345-kV switchyard looping into the existing New York Power Authority (NYPA) Clay to Pannell 345-kV transmission line, will be located within the Project Area. The following sections describe specific Project features and the representative mapping prepared.

The Project proposes to install fixed-tilt racking systems. As the technology is rapidly evolving for solar panel technology, and market conditions at the time procurement decisions need to be made are unknown at this time, the Applicant is considering fixed solar racking technology, with an alternate design using tracker racking technology. The Proposed Layout (Appendix 11-1) depicts a fixed design which represents the most likely racking design to be used during construction. The fixed array racking systems to be utilized would be similar to the MaxSpan Pile Driven System, specification sheets of which have been included in Appendix 2-2. Regardless of the type of array racking system ultimately selected for the Project, the Applicant intends to utilize a solar module similar to the Jinko Solar Eagle 72HM G2 380-400-Watt Mono Perc Diamond Cell. A specification sheet for this module has been included in Appendix 2-1. A specification sheet for the Samsung energy storage system has been included in Appendix 2-4.

Only selected elements of the Project would change based upon the combination of array racking system type used, but all changes would be within the Project Component LOD and to the same land uses shown in the Proposed Layout. The location of interior access roads and inverters, depending upon the final locations, could differ from that shown in the Exhibit 11 plans. Land coverage ratios will also be adjusted but they are not expected to be substantial or significant. Again, land uses are the same in all locations so potential environmental impacts

will be of the same nature and magnitude. Accordingly, the drawings, plan, and maps required by Exhibit 11 depict a fixed racking system.

### **3(a) Topographic Maps**

The Applicant has reproduced the most recent United States Geological Survey (USGS) maps at original scale to indicate the locations of the Project facilities, including all Project Components and interconnection facilities. Designed to deliver a coherent perspective of the data in a Geographic Information System (GIS) accessible format, the USGS/National Map topographic mapping portrays information consistent with the most recent USGS 7.5-minute (1:24,000) quadrangle topographic maps at large scales (USGS, 2019). The Project Area is located within the Victory, Cato, Montezuma, and Weedsport quadrangles. The USGS mapping database presents detailed topographic mapping for the United States, as well as land cover imagery for the world. The following sections describe mapping produced to represent Project Facilities on topographic mapping.

#### ***(1) Location of Project Components***

Figure 3-1 depicts the locations of the proposed major electric generation components and interconnection facilities associated with the Project. These items include the commercial scale solar arrays, energy storage system, inverters, access roads, collection lines, on-Site laydown/staging areas, collection substation, and Point of Interconnection (POI) switchyard. Mapping includes the locations of roads, substations, and similar facilities, as applicable. The Project is not anticipated to include an Operation & Maintenance (O&M) building. The facilities mapped on Figure 3-1 are collectively referred to as the Project. More detail regarding specific Facility components (e.g. fencing and similar details) is provided as part of the site plan drawings and described within Exhibit 11.

The Project is composed of multiple land parcels, currently under lease or purchase option from private landowners. The location of these parcels is shown on Figure 4-3.

Alternative solar panel array locations within the Project Area were evaluated during the course of the Project siting effort. These alternative locations are shown on Figure 9-1 and discussed in Exhibit 9 (Alternatives).

## ***(2) Proposed Interconnection Locations***

The Project Components will be located within the defined Project Area and therefore, are mapped in Figure 3-1. More specifically, the interconnection facilities will be located within the fence line of the collection substation and switchyard that will be situated in the northern portion of the Project Area along Cooper Street, adjacent to the existing NYPA transmission line right-of-way (ROW), in the Town of Conquest. Figure 3-2 shows the interconnections, including the electric collection lines, collection substation, and the POI switchyard in relation to municipal boundaries, taxing jurisdictions, designated neighborhoods or community districts. The Project will have no need for potable water connection or wastewater connection as there is no proposed O&M building as part of the Project.

## ***(3) Proposed Ancillary Features***

There are no ancillary features proposed that fall outside the Project Area and/or the Siting Board's jurisdiction under Public Service Law (PSL) Article 10.

## ***(4) Proposed Electric Transmission Facility Subject to Article VII***

There are no electric transmission line or fuel gas transmission line interconnections that are subject to review under Article VII of the PSL proposed as part of the Project; therefore, this information is not required to be included as part of the Application.

## ***(5) Project Study Areas***

Numerous studies were conducted in support of this Article 10 Application. A Study Area encompassing a 2-mile radius around the Project Area was employed during the Preliminary Scoping Statement (PSS) process and agreed to in the Stipulations. Depending upon the specific resource being evaluated, variations from the 2-mile Study Area were employed as described below:

- Noise (see Exhibit 19 for additional detail): The potential for noise generated from operation of the proposed Facility was assessed for receptor locations within the 30-dBA noise contour, or 1,500 feet from the edge of the Project Area, whichever is greater. This was based upon the proximity of residences, outdoor public facilities and areas, State Forest Lands, hospitals, places of worship, cemeteries, schools, campsites, summer camps, Public Parks, Federal and NY State Lands, and other identified noise-sensitive receptors, to Project Components, and structure areas assumed to be sensitive where a

structure was not accessible for field verification or classifiable using aerial imagery. Seasonal receptors included, at a minimum, cabins and hunting camps identified by property tax codes and any other seasonal residences with septic systems/running water.

- Archaeological Area of Potential Effect (APE) (see Exhibit 20 for additional detail): The APE was defined as where ground disturbances may occur, inclusive of access roads, workspaces, collection lines, the proposed substation and interconnection facilities, and other areas of significant ground-disturbing activities in accordance with New York State Office of Parks, Recreation and Historic Preservation (OPRHP) guidance.
- Architectural Survey Area (see Exhibit 20 for additional details): A Zone of Visual Impact was evaluated within a 2-mile radius from the Project Area boundary. For assessment of direct effects, the APE was defined as the area of construction and those areas removed in distance, where Project Components will be visible and where there is potential for significant visual effect, the extents of which were determined based upon the results of a viewshed assessment (see Exhibit 24 for additional details on the viewshed assessment).
- Visual Study Area (VSA) (see Exhibit 24 for additional detail): A primary VSA of 5 miles was evaluated.
- Wetland/Stream Survey Area (see Exhibits 22 and 23 for additional detail): Wetland and stream delineations were conducted on approximately 2,288.7 acres within the Project Area. The LOD proposed for the installation of the Project and associated Project Components is approximately 1,199.8 acres. Wetland estimation was conducted by the Applicant for areas outside of the Project Area located within 100 feet of areas to be disturbed by the Project.

### **3(b) Maps of Project Area**

Figure 3-1 shows the location of the Project, Study Area, and Project Components, including the commercial-scale solar arrays, energy storage system, access roads, collection lines, on-Site laydown/staging areas, collection substation, and 345-kV switchyard in relation to municipal boundaries, taxing jurisdictions, designated neighborhoods or community districts at a scale sufficient to determine and demonstrate relation of facilities to those geographic and political features, where applicable. More detail regarding specific Project Components is provided as part of the Site Plan drawings, as described in Exhibit 11.

Alternative solar panel array locations within the Project Area are shown on Figure 9-1 and discussed in Exhibit 9 (Alternatives).

### **3(c) Description of the Proposed Facility Location**

The Project Area and all Project Components will be located entirely within Cayuga County and more specifically within the Town of Conquest. The Project is not located within designated neighborhood or community districts. Refer to Exhibit 4 for additional information regarding municipalities.

The Project Area, including all Project Components, is located within the Cato-Meridian, Port Byron, and Weedsport Central School Districts.

Alternative solar panel array locations within the Project Area are shown on Figure 9-1 and discussed in Exhibit 9 (Alternatives).

## References

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