



SOMERSET SOLAR, LLC

MATTER NO. 22-00026

900-2.16 Exhibit 15 Revised

Agricultural Resources

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ACRONYM LIST

%	percent
AES	The AES Corporation, Inc.
Applicant	Somerset Solar, LLC
CnB	Collamer silt loam, 2–5% slopes
CDL	Cropland Data Layer
EM	Environmental Monitor
Facility	Somerset Solar Facility
Facility Site	the approximately 700-acre limit of disturbance
Facility Substation	Somerset Collector Substation
Guidelines	New York State Department of Agriculture and Markets guidance document “Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands,” dated October 2019
HDD	horizontal directional drill
MSG	Mineral Soil Group
MW	megawatt
NaA	Niagara silt loam, 0–2% slopes
NASS	National Agricultural Statistics Service
NYCRR	New York Codes, Rules and Regulations
NYS	New York State
NYSAGM	NYS Department of Agriculture and Markets
ORES	Office of Renewable Energy Siting
PV	Photovoltaic
RbA	Rhinebeck silt loam, 0–2% slopes
SWDA	Solid Waste Disposal Area
USDA	United States Department of Agriculture
USGS	United States Geological Survey

GLOSSARY TERMS

Applicant	Somerset Solar, LLC, a subsidiary of The AES Corporation, Inc. (AES), the entity seeking a siting permit for the Facility Site from the Office of Renewable Energy Siting (ORES) under Section (§) 94-c of the New York State Executive Law.
Application	Application under §94-c of the New York State Executive Law for review by the ORES for a Siting Permit.
Facility	The proposed components to be constructed for the collection and distribution of energy for the Somerset Solar Facility, which includes solar arrays, inverters, electric collection lines, and the collector substation.
Facility Site	The limit of disturbance (LOD) that will be utilized for construction and operation of the Facility, which totals about 700 acres on the Project Parcels in the Town of Somerset, Niagara County, New York (Figure 2-1).
Project Parcels	The parcels that are currently under agreement with the Applicant and Landowner, totaling about 1,784 acres in the Town of Somerset, Niagara County, New York, on which the Facility Site will be sited (Figure 3-1).
Project Site	The acreage of the Project Parcels under agreement between the Applicant and the Landowner, consisting of approximately 1,396 acres, in which the Applicant has performed diligence, surveys and assessments in support of Facility design and layout.

EXHIBIT 15 AGRICULTURAL RESOURCES

This exhibit addresses the requirements specified in New York Codes, Rules and Regulations (NYCRR) Section (§) 900-2.16. To facilitate construction and operation of the Facility for the duration of its useful life (35 years), approximately 368 acres of active agricultural land¹ within the Facility Site (52.6% of the Facility Site) will be taken out of agricultural production and be used for solar energy components. Of these 368 acres, only approximately 6 acres of active agricultural land will be permanently impacted by construction of access roads, inverter pads, and fenceposts (Exhibit 11). Facility components will result in approximately 362 acres of temporary disturbance to agricultural lands due to general disturbances (i.e., foot and vehicle traffic, general construction activities), installation of PV racking, laydown yards, tree/shrub clearing and grubbing, stormwater filter strips, and fencing. Within the Facility Site, approximately 540 acres (77%) of soils are classified as NYS Agriculture Land Classification's MSGs 1–4. Permanent impacts to MSGs 1–4 for the inverter pads, access roads, and the Facility Substation footprint totals approximately 11.2 acres. Temporary impacts from all other construction activities to MSGs 1–4 totals approximately 441 acres. Exhibit 24 provides additional discussion on Facility impacts to prime farmland, prime farmland if drained, and farmland of statewide importance; and these resources are depicted on Figure 24-1 and Figure 24-2.

All of the Facility Site is located within Niagara County Agricultural District 7. A majority of the proposed solar panel arrays are sited within previously disturbed industrial areas and existing agricultural fields in an effort to minimize tree/shrub clearing and grubbing required for the Facility Site. Installation of the solar panels will result in minimal ground disturbance, which will protect viable agricultural land for future use following decommissioning and restoration of the Somerset Solar Facility (Facility) at the end of its useful life. A conceptual co-use plan that includes sheep grazing on a rotational basis within the growing season, for proposed for continued agricultural use has been prepared for the Facility. All of the agricultural land present in the Project Site is owned by the parcel landowners, and as such Agricultural Viability Landowner Surveys were not conducted. Based on information obtained from landowner for tenant farmers (J. Marabella, personal communication 2022, 2023; O. Panno, personal communication 2022), field observations, and data available from the USDA NASS CropScape database Cropland Data Layer (CDL), the agricultural land present on the Project Site has primarily been used for production of soybeans, grassland/pasture (including hay), and corn over the past 5 years.

¹ - Based on field-verification estimates of land cover types.

The Facility will be constructed in accordance with NYS Department of Agriculture and Markets (NYSAGM) “*Guidelines for Solar Energy Projects-Construction Mitigation for Agricultural Lands*” (Guidelines) (NYSAGM 2019) and per Somerset Solar, LLC’s (Applicant’s) Drainage Remediation Plan and Agricultural Plan. The Facility has been designed to comply with 19 NYCRR §900-2.16 and the Uniform Standards and Conditions and impacts to agricultural resources have been avoided and minimized to the maximum extent practicable.

15(a) Agricultural Assessment Within the 5-Mile Study Area

The Facility, proposed in the Town of Somerset will consist of photovoltaic (PV) solar arrays and associated infrastructure. The Facility Site represents the “target” area within which selected areas will be developed with solar energy generating equipment and supporting facilities. The Facility Site includes portions of the property occupied by the former coal plant, Somerset Station, and adjoining properties. The parcels on which the Facility will be located are currently owned by Terroir Development LLC and Somerset Operating Company LLC, and are being leased to The AES Corporation, Inc. (AES) for the purpose of constructing and operating the proposed renewable energy facility (Exhibit 4). The PV solar arrays will be contained within the Facility Site which generally includes developed and disturbed industrial land associated with the former coal plant located north of NYS Route 18/Lake Road, including a coal storage pile and coal ash landfill (Solid Waste Disposal Area [SWDA] II); and agricultural and forested lands located south of NYS Route 18/Lake Road.

(1) NYS-Certified Agricultural Districts

The following figures and descriptions contain data for the 5-mile study area and/or for the Facility Site, as described below.

Land within NYS Certified Agricultural Districts by tax parcel is depicted for the 5-mile study area in Figure 15-1. All of the Facility Site parcels are located within Agricultural District 7. Agricultural District 7 consists of 184,489 acres, of which 127,367 acres are farmed (NYSAGM no date a). Niagara County Agricultural District 7 was created in June of 1978, last reviewed in January of 2019, and is up for its next 8-year review in January of 2027 (NYSAGM no date b, Cornell Geospatial Information Repository 2019). Within the 5-mile study area (inclusive of the Project Site), there are 27,488 acres of land designated as agricultural districts. Of the five tax parcels within the Facility Site, all are designated as being within Agricultural District 7. This accounts for 9.2% of agricultural district land within the Town of Somerset.

(2) Real Property Agricultural Value Assessment

None of the land within the Project Site include lands that have received a Real Property Agricultural Value Assessment as shown on Figure 15-2, which also depicts the tax parcels.

The NYSAGM in conjunction with the NYS Department of Taxation and Finance administer the agricultural assessment program (NYSAGM no date c). This program allows landowners to receive a reduction in property tax bills for land in agricultural production based on the agricultural assessment values determined through the NYS Land Classification System (NYSAGM no date c). To gather this information, the Applicant obtained Niagara County Tax Assessor data on the Real Property Agricultural Assessments for the Town of Somerset and towns within the 5-mile study area, including the Towns of Hartland and Newfane. Based on the records available for each town there are 37 parcels within the Town of Hartland, 77 parcels within the Town of Newfane, and 116 parcels within the Town of Somerset receiving Real Property Agricultural Assessments. No parcels receiving a Real Property Agricultural Assessment were identified for the 5-mile study area in the Village of Barker. The records received by the Applicant have been included as Appendix 15-D.

(3) Zoning Districts or Overlay Zones

The proposed Facility is located within the Town of Somerset in Niagara County, New York. In addition to the Town of Somerset, the Facility's 5-mile study area also includes the Village of Barker, Town of Hartland, and Town of Newfane, within Niagara County. Municipal zoning districts or overlay zones including those designated for renewable energy for the Facility Site are depicted in Figure 3-8 and discussed further in Exhibit 3 and Exhibit 24.

Town of Somerset

According to the Town of Somerset's Solar Energy Law adopted in 2022 (Appendix 24-A) and the proposed size of the Facility, the Facility falls within the permitting requirements for Tier 4 Solar Energy Systems, which also include the requirements of Tier 3 Solar Energy Systems. According to the 2022 Solar Energy Law, under the Tier 3 and Tier 4 requirements, solar energy systems are permitted through the issuance of a special use permit within the Industrial, General Industry Zoning Districts, and Planned Unit Development Districts (as restricted above), and subject to site plan application requirements. The Facility will be located in PUD and Agricultural Districts.

The §94-c regulations expressly preempt local procedural requirements, such as permits and

approvals which would otherwise be required by the host municipalities for construction and operation of the Facility (e.g., special use permit). However, local substantive requirements (e.g., setbacks, height limits, lot coverage requirements) will be applied to the Facility unless the Office of Renewable Energy Siting (ORES) finds them to be unreasonably burdensome relative to requirements under §94-c. Exhibit 24 provides additional detail on the Town's Solar Energy Law and how the Facility complies with local laws and ordinances.

Town of Hartland

The Town of Hartland Zoning Code (Chapter 144) regulates solar development in §144-17 Solar Energy Systems, with utility-scale solar energy systems permitted only in an Agricultural Use District or Agricultural Business Use District, and Light Industrial Use District (I District), by special permit by the planning board (Town of Hartland 2017).

Town of Newfane

The Town of Newfane's Solar Energy Local Law is pending adoption (Town of Newfane 2021). The proposed solar law classifies solar development similar to the Town of Somerset, in that solar projects are categorized in tiers relative to their type and size.

- Tier 1 - Roof-mounted, building-mounted, and building-integrated accessory equipment that generates net energy metering when installed on a conforming residence, facility or structure.
- Tier 2 - Ground-mounted solar energy systems intended only to provide energy for on-site use at residential, agricultural, business, commercial or community facilities; and are limited to solar energy systems that generate up to 110% of the electricity consumed on the site over the previous 12 months.
- Tier 3 - Utility-grade, commercial or other large solar energy systems that produce energy for off-site distribution, consumption and use. Tier 3 systems are those that do not meet the criteria for Tier 2 systems and do not exceed 50 acres in size.
- Tier 4 – Utility-grade, commercial or other large solar energy systems that produce energy for off-site distribution, consumption and use; and that are over 50 acres in size.

Tier 3 and Tier 4 solar energy systems are permitted within Agricultural Residential, Rural Residential, and Industrial zones when they follow provisions of the Solar Energy Local Law and other state and federal regulations; and after a Site Plan Review has been approved and a Special Exception Use permit is authorized (Town of Newfane 2021).

(4) Agricultural Land Uses Compared to Non-Agricultural Land Uses

The 5-mile study area around the Facility Site was classified through a review of the most recent NASS CDL (USDA, NASS 2022),² aerial photography, and onsite observations during field visits. Active agriculture within the 5-mile study area is shown on the Figure 15-3 map set. Historic aerial imagery from 2018, 2016, 2015, 2014, 2012, 2011, 2009, 2008, 2007, 2006, 1994, 1993, and 1985 depicts agricultural uses within open areas of the 5-mile study area dating back to at least the mid-1980s. The agricultural areas mostly consist of hay, corn, and soybean fields.

There are approximately 59,842 acres of land cover within the 5-mile study area. According to the most recent USDA NASS CDL, approximately 21,269 acres or 36% are agricultural land and 38,573 acres or 64% is non-agriculture land cover (i.e., developed, woodland/forested area, wetlands and open water, barren land and shrublands) (Figure 15-3).

As of 2021, the primary crops grown in the 5-mile study area included corn (approximately 29%), grassland/pasture (approximately 20%), soybeans (approximately 18%), alfalfa (approximately 13%) and apples (approximately 8%) (USDA, NASS 2022) which comprised approximately 88% of all crop types grown. Within the 5-mile study area, historic aerial imagery from 2018, 2016, 2015, 2014, 2012, 2011, 2009, 2008, 2007, 2006, 1994, 1993, and 1985 depicts agricultural uses within open areas dating back to at least the mid-1980s. The agricultural areas mostly consist of hay, corn, and soybean fields.

Of the approximately 700 acres within the Facility Site, there are approximately 573 acres of agriculture land as identified by the CDL, accounting for approximately 82% of the total Facility Site. The remaining 123 acres of land, or approximately 18% of the Facility Site, consists of non-agriculture land cover, primarily deciduous forest (8%), developed/high intensity (3%), and woody wetlands (3%) (USDA, NASS 2022).

Table 15-1 below summarizes the land cover within the Facility Site and the study area according to the USDA, NASS CDL data (USDA, NASS 2022), and the results can be seen in Figure 15-3. The USDA, NASS CDL information shown on Figure 15-3 within the active agricultural fields on the Project Site, primarily maps all active agricultural fields as corn, with limited soybean and/or hay and pasture mapped. This generally aligns with the information received from the landowners as obtained from their tenant farmers (see Table 15-5).

² The United States Department of Agriculture, National Agricultural Statistics Service Cropland Data Layer is dated 2022, but contains complete data through 2021.

Table 15-1. Land Cover, Including Cropland Types, within the Facility Site and Study Area

Land Cover Classification	Acreage within Facility Site	Acreage within Study Area
Soybeans	378.9	3,397.6
Grassland/Pasture	85.1	4,173.3
Deciduous Forest	53.1	8,490.6
Dry Beans	30.0	272.9
Corn	21.7	6,185.8
Developed/High Intensity	18.0	90.0
Woody Wetlands	18.0	8,124.2
Alfalfa	17.6	2,788.4
Apples	15.4	1,602.8
Other Hay/Non-Alfalfa	11.8	961.9
Open Water	8.8	149.1
Barren	6.1	21.6
Developed/Medium Intensity	4.9	183.4
Fallow/Idle Cropland	5.4	103.9
Developed/Low Intensity	4.5	783.9
Mixed Forest	4.1	432.4
Winter Wheat	3.3	742.9
Herbaceous Wetlands	3.3	80.8
Developed/Open Space	1.6	1,488.6
Cherries	1.1	103.9
Oats	0.8	19.2
Clover/Wildflowers	0.7	87.2
Shrubland	0.4	13.3
Peaches	0.3	13.5
Peas	0.3	11.5
Spring Wheat	0.3	4.6
Peppers	0.2	2.0
Christmas Trees	0.2	5.6
Barley	0.0	0.4
Blueberries	0.0	0.2
Cabbage	0.0	91.2
Cantaloupes	0.0	0.2
Carrots	0.0	0.4
Cucumbers	0.0	76.9

Land Cover Classification	Acreage within Facility Site	Acreage within Study Area
Double Crop Triticale/Corn	0.0	0.4
Double Crop Winter wheat/Soybeans	0.0	0.2
Evergreen Forest	0.0	49.1
Grapes	0.0	19.8
Greens	0.0	0.4
Miscellaneous Vegetables and Fruits	0.0	1.6
Onions	0.0	0.9
Other Crops	0.0	0.2
Pears	0.0	0.2
Plums	0.0	0.2
Potatoes	0.0	1.6
Pumpkins	0.0	0.2
Rye	0.0	11.1
Sod/Grass Seed	0.0	0.2
Sorghum	0.0	1.1
Speltz	0.0	0.7
Squash	0.0	0.9
Sweet Corn	0.0	2.0
Tomatoes	0.0	4.9
Triticale	0.0	6.2

(5) Existing Energy Infrastructure and Completed Renewable Energy Facilities

Existing energy infrastructure in the 5-mile study area is depicted in Figure 15-4 and includes the point of interconnection for the Facility at the existing New York State Electric and Gas Corporation 345-kilovolt Kintigh Substation. The Kintigh Substation is located within the Project Site (Exhibit 5, Appendix 5-B, and Figure 3-1). Existing utility and energy infrastructure including existing overhead and underground lines for gas and electric have previously been discussed in Exhibit 3 and are included on Figure 3-6 and Figure 15-4. Based on a review of the United States Geologic Survey (USGS) Wind Turbine Database, there are no active wind turbines located within the Facility Site, or the 5-mile study area (USGS 2022). The closest solar facility to the Facility Site is a small solar array located south of Haight Road just west of the at the Barker Central School District, approximately 1 mile southeast of the Facility. The Applicant also is aware of a 350-megawatt (MW) solar project (Ridge View Solar) that is planned in Hartland, New

York, approximately 2.3 miles south of the Facility Site at its closest proposed point (Ridge View Solar no date). According to the project's website, this facility is proposed to be operational in 2027.

(6) Active Agricultural Businesses, Facilities, and/or Infrastructure

The Facility will be constructed in accordance with the Guidelines to ensure agricultural soil conditions are maintained in temporary disturbance areas, which is discussed further below in section 15(c) of this exhibit and described in Appendix 15-A. Activities associated with development of the Facility includes installation of racking posts or ballasted foundations to support solar modules within the array areas and trenching (underground) or installation of sleepers (above ground) for electrical cabling. The construction of access roads throughout the Facility Site will require cut and fill; however, reuse of existing access roads has been accommodated for reuse where feasible for the Facility. For a detailed analysis on the evaluation of suitable building and equipment foundations within the Facility Site, see Exhibit 10, section 10(b).

Approximately 396 acres (22%) of the 1,784 acres for the Project Parcels and approximately 394 acres (28%) of the 1,396 acres of the Project Site are identified as active agricultural land. To facilitate construction and operation of the Facility for the duration of its useful life (35 years), approximately 368 acres of active agricultural land³ within the Facility Site (52.6% of the Facility Site) will be taken out of agricultural production and be used for solar energy components. While operational, the Facility will use agricultural land for solar energy production. This will ensure that parcels are retained intact for the life of the Facility, avoiding resale or subdivision of the parcels for other purposes that could eliminate their ability to be reverted back to agricultural use following decommissioning at the end of the Facility's useful life. A conceptual co-use plan that includes sheep grazing on a rotational basis within the growing season, proposed for continued agricultural use, has been prepared for the Facility. Establishment of meadow habitat across the Facility Site and the inclusion of proposed sheep grazing as a co-use will promote improved soil health across agricultural lands on the Facility Site over the operating life of the Facility, due to the absence of fertilizer and herbicide/pesticide inputs and the reduced frequency of disturbances to soils commonly associated with row crop farming activities.

The solar panels for the Facility were selected primarily for their efficiency and effectiveness in harnessing the maximum amount of solar power at any given time (with consideration given to

³ - Based on field-verification estimates of land cover types.

limiting factors such as shading, cloud cover, and seasonal daylight constraints), which concurrently minimizes the amount of land required for generation. The portion of solar panel arrays sited on agricultural lands within the Facility Site will have pile driven racking systems, which will result in minimal ground disturbance in those areas where grading is not required to meet racking tolerances. Where grading and excavation is proposed to meet racking tolerances identified by the manufacturer, or to provide required slope tolerances for other infrastructure, topsoil will be stripped, stockpiled, and returned for reuse within existing agricultural areas, which will reduce impacts and restoration requirements during decommissioning of the Facility.

The Facility contributes to environmental sustainability of farms through harnessing solar energy within the Facility Site and providing renewable energy to the surrounding communities. Concurrently, the Facility will contribute to climate change mitigation by providing utilities clean energy for distribution and consequently reducing the need for other fossil fuel technology operation to meet energy demands.

Consistency with the Town of Somerset's Comprehensive Plan

The Town of Somerset's Comprehensive Plan identifies extension of the Niagara County Wine Trail, expansion on Mayer Brothers, and further development of the cidery (Blackbird Cider Works in Barker, New York) as potential enhancements to expanding agritourism. Table 15-2 lists the primary agritourism businesses identified within the Village of Barker and nearby Appleton. Mayer Brothers, located approximately ¼-mile west of the Facility Site, is a wholesale food distributor of brand-name apple beverages and bottled water, as well as private-label water and beverage products (including contract and co-packing manufacturing), offering these products to their customers located nationwide (Mayer Brothers 2023). While the Town of Somerset does not currently include a winery, one of the wineries listed on the Niagara County Wine Trail is The Winery at Marjim Manor in Appleton, New York, which is located approximately 1 mile west of the Facility (Niagara County Wine Trail 2022). The area of greatest potential for expanding tourism is identified as the northeast sector of the Town of Somerset, in the Town's Agritourism Area (which is identified on the Town Vision Map 9 of the Comprehensive Plan) (Town of Somerset 2016). The Facility is located approximately 2 miles west of the Town's Agritourism Area (see Vision Map, Map 9 in Appendix 3-A). From an agricultural perspective, construction and operation of the Facility is not anticipated to impact agritourism in the Town of Somerset, as the Facility would not hinder continued operations of the primary sources of agritourism opportunities currently offered in the Town of Somerset and nearby Appleton. The Facility is consistent with the Town of Somerset's vision for potential expansion of agritourism

opportunities as identified in their Comprehensive Plan. While the Town’s Comprehensive Plan does not identify Russells U-Pick Blueberry operation that is located adjacent to the western edge of the Facility as an agritourism business, the Facility also would not prevent the continued operation or participation by the public to this agricultural business.

Table 15-2. Agritourism Businesses identified in the Facility Area

Agritourism Business	Business Type	Location	Approximate Distance from Facility
Russells U-Pick Blueberries	Pick your own fruit	7499 Lake Road, Appleton, NY	Less than 50 feet west
Mahe Bros	Wholesale food distributor (water, beverages)	7389 Lake Road, Appleton, NY	1,150 feet west
Blackbird Cider Works	Craft hard cider producer and tasting room	8503 Lower Lake Road, Barker, NY	4,700 feet east
Winery at Marjim Manor	Winery, wine tasting and hosting of various events; part of Niagara Wine Trail	7171 East Lake Road, Appleton, NY	5,000 feet west

(7) Potential Construction Impacts

The Facility will be constructed in accordance with the NYSAGM guidance document “Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands”, dated October of 2019, which is discussed further below in section 15(c) of this exhibit. Planting, harvesting and tilling of row crops, production of pasture/hay, and similar agricultural use and activities currently being conducted within the Facility Site will cease to continue once construction of the Facility is initiated. However, as phased construction activities are initiated within the 10 development areas identified for the Facility at the beginning of the construction period, farming may be allowed to continue when and where construction activities have not begun. Due to safety and accessibility reasons, farming practices will be discontinued once access to the development areas is required to initiate construction activities, as continued farming practices are not compatible with construction activities. Depending on the time of year that phased construction

is initiated in each of the development areas that contain active farm fields, compensation for crop losses will be provided to the landowners and tenant farmers if crops are present in agricultural fields at the initiation of construction activities, if necessary.

Most of the agricultural land located within the Facility Site will support the PV arrays. Where grading is not required, limited impacts to the long-term use of the agricultural soils are anticipated, as impacts would be limited to compaction and installation of racking posts. Installation of electrical collection lines will be installed in such a way that impacts to active agricultural land will be minimal, with topsoil segregated during trenching activities and replaced during backfill. While the majority of the agricultural lands that are currently used to support pasture/hay and row crop production will be taken out of long-term agricultural practices, these lands will be restored and available for continued agricultural uses after the Facility's useful life. Once meadow habitat is established within the array areas, sheep grazing is proposed on a rotational basis within the growing season as a continued agricultural co-use during operations. Following the decommissioning of the Facility after its useful life, the land will be restored per the Guidelines. The Facility's conceptual agricultural co-use plan is provided as Appendix 15-E and the Facility's Restoration and Decommissioning Plan is provided as Appendix 23-A.

(8) Temporary and Permanent Impacts on Agricultural Resources

The Facility Site includes the solar panel array areas that include either pile-driven racking or racking on ballasts, access roads, equipment pads (for inverters and medium voltage transformers), trenching for underground electrical collection lines or above-ground cabling on sleepers in areas where electrical collection lines are located aboveground, the Somerset Collector Substation (Facility Substation), 21 horizontal directional drilling (HDD) areas, security fencing, laydown yards, and stormwater facilities, including filter strips.

Approximately 368 acres⁴ of disturbance to active agricultural land is anticipated to occur within the Facility Site (52.6% of the Facility Site). Of these 368 acres, only approximately 6 acres of active agricultural land will be permanently impacted by construction of access roads, inverter pads, and fenceposts (Exhibit 11). Facility components that will result in approximately 368 acres of temporary disturbance to agricultural lands due to general disturbances (i.e., foot and vehicle traffic, general construction activities), installation of PV racking, laydown yards, tree/shrub clearing and grubbing, stormwater filter strips, and fencing. Within the Facility Site, approximately 540 acres (77%) of soils are classified as NYS Agriculture Land Classification's MSGs 1–4.

⁴ - Based on field-verification estimates of land cover types.

Permanent impacts to MSGs 1–4 for the inverter pads, access roads, and the Facility Substation footprint totals approximately 11.2 acres. Temporary impacts from all other construction activities to MSGs 1–4 totals approximately 441 acres.

It is important to note that not all of the agricultural land within the fence line will be physically disturbed. To the maximum extent practicable, the Applicant has sited Facility components to minimize impacts to agricultural lands within the Facility Site. For example, the solar panel array area will have only approximately 0.02 acres of permanent ground disturbance that will occur for the installation of mounting posts where pile driving is allowed. The solar panels will cover approximately 281 acres of agricultural land (of which 201 acres are MSGs 1–4). Ground disturbance to agricultural lands for the life of the Facility includes limited grading and installation of posts for the racking systems, footings for equipment pads, and construction of access roads. The Facility will not impede adjacent agricultural land uses. The useful economic life of the Facility is estimated to be a minimum of 35 years, and as detailed in the Site Decommissioning and Restoration Plan (Appendix 23-A), the Applicant will return lands within the Facility Site to a condition similar to what was present upon initiation of construction activities. As appropriate, disturbed areas will be reseeded with an appropriate seed mix and careful mobilization of equipment and infrastructure will be conducted to minimize soil disturbance. As such, agricultural land sited within the Facility Site will be able to return to its pre-construction use following decommissioning of the Facility.

Table 15-3 provides a summary of the acreages of MSGs 1–4 for the Facility and geographic areas within the region.

Table 15-3. Mineral Soil Groups 1–4 in Various Geographic Areas

Geographic Area	Total Area (Acres)	Mapped Mineral Soil Groups 1–4 (Acres)
Somerset Solar Facility	704	512
Village of Barker	256	2
Town of Hartland	33,536	13,491
Town of Newfane	33,344	15,072
Town of Somerset	23,808	8,784
5-mile Study Area	74,560	15,808
Niagara County	729,600	80,256
New York State	30,990,080	3,899,520

Table 15-4 provides a summary of the acreage of MSGs 1–8 that are located within the Project

Parcels, Project Site, and Facility Site (limit of disturbance defined by the fenced in area). As noted also in Section 15(b)(6), the Facility Site does not contain any soils mapped as MSG 9 or MSG 10, but there are a few areas mapped as MSG 9 mapped outside of the Facility Site, within the 5-mile study area as shown on Figure 15-9. Generally, the greatest acreage of MSGs within all three areas consists of MSGs 3, 4 and 5, followed by MSG 2. MSGs 1, 6, 7 and 8 make up the lowest acreage of MSG groups mapped within the three areas.

Table 15-4. Acres of Mineral Soil Groups 1–10 located within the Project Parcels, Project Site and Facility Site

Mineral Soil Group	Project Parcels	Project Site	Facility Site
1	26	26	11
2	278	177	100
3	625	440	241
4	439	414	186
5	331	282	136
6	6	6	5
7	26	26	7
8	28	19	8

15(b) Agricultural Resources Maps

(1) Field-verified Agricultural Land Use

All Project Site parcels contain at least some active agricultural land that has been involved in the production of crops for at least three of the five past years, as verified with Project Site landowners (J. Marabella, personal communication 2022, 2023) and shown on Figure 15-5 and summarized in Table 15-5.

Figure 15-3 depicts the USDA, NASS CDL data for the Facility Site and 5-mile study area. As noted above in Section 15(a)(4), the USDA, NASS CDL information shown on Figure 15-3 within the active agricultural fields on the Project Site, primarily maps all active agricultural fields as corn, with limited soybean and/or hay and pasture mapped. This generally aligns with the information received from the landowners as obtained from their tenant farmers and summarized in Table 15-5. As noted in Section 15(a)(2), none of the Project Site parcels have been identified as having received a Real Property Agricultural Value Assessment (Figure 15-2).

Table 15-5. Agricultural Use by Parcel within the Facility Site

Parcel ID	Acreage of Parcel ¹	Acreage of Facility Site Use	Acreage of Field-Verified Agricultural Land within Facility Site	Description of Agricultural Use in Recent Years
7.00-3-28	278.3	241.9	173.9	Field located north of New York State (NYS) Route 18/Lake Road has been active for at least three of the past five years, with production of soybeans, corn, and hay (crop rotation). Field located south of NYS Route 18/Lake Road, only the central portion has been active for at least three of the past five years with production of soybeans, corn, and hay (crop rotation).
8.00-1-1.11	621.5	151.6	0.0	Fields located in southern area of linear portion of parcel located south of former coal plant and NYS Route 18/Lake Road (approximately 23.8 acres) has been active for at least three of the past five years with production of soybeans (crop rotation); however, this portion of the parcel is located outside the Facility Site.
8.00-1-1.12	36.6	19.1	18.0	Field located southeast of the intersection of NYS Route 18/Lake Road and County Route 65/Hosmer Road, only central portion has been active for at least three of the past five years with production of soybeans, corn, and hay (crop rotation).
8.00-1-1.2	815.0	257.4	163.5	Fields located in eastern portion of Project Site north and south of NYS Route 18/Lake Road, have been active for at least three of the past five years with production

Parcel ID	Acreage of Parcel ¹	Acreage of Facility Site Use	Acreage of Field-Verified Agricultural Land within Facility Site	Description of Agricultural Use in Recent Years
				of soybeans, corn, and hay (crop rotation).
8.00-1-38	32.5	20.9	19.6	Field located south of NYS Route 18/Lake Road, only southern portion has been active for at least three of the past five years with production of soybeans, corn, and hay (crop rotation).

1 – Acreage based on Niagara County Assessor Deeded acreage.

Sources: J. Marabella, personal communication, 2022 and 2023; and O. Panno, personal communication, 2022.

Expanding beyond the Facility Site to the 5-mile study area, data was analyzed using CDL data available from 2017 to 2021 to further assess agricultural land use over the past 5 years. The acreage of lands classified as “agricultural” vs “non-agricultural” within the 5-mile study area remained consistent over the past 5 years. The agricultural acreage ranged from 20,839.1 acres in 2017 to 21,002.3 acres in 2018; and the non-agricultural acreages ranged from 44,616.9 acres in 2018 to 44,780.1 acres in 2017 (USDA NASS 2022).

(2) Agricultural Production Acreage Proposed To Remain in Agricultural Use

None of the existing acreage currently in agricultural production in the Facility Site is proposed to remain in agricultural production of crops (row crops, hay/pasture) during Facility operations, and all of the approximately 368 acres of agricultural land⁵ located within the Facility Site will be taken out of agricultural production (of row crops, hay/pasture) over the long-term life of the Facility. However, agricultural co-use is proposed through the use of sheep grazing on a rotational basis during the growing season (see section 15(e) of this exhibit).

⁵ - Based on field-verification estimates of land cover types.

(3) Landowner-Imposed Development Restrictions

Landowner-imposed development restrictions are identified on Figure 15-6 and include land within the Project Parcels that are not under lease agreement with the landowners, existing Verizon easements, and the Lake Mariner Data Center. The Verizon easements include a potential location of a telecommunications tower for the Lake Mariner Data Center (both the tower and data center are located outside the Facility Site), and existing underground Verizon telecommunications lines, for which a portion located within the Facility Site will be relocated to provide connection and telecommunications service to the Facility Substation (Appendix 5-A, Sheet PV-C.02.01). The proposed telecommunications tower is still in the planning stages for Verizon and detailed plans for its final location and construction schedule have not been identified at this time. One of the Facility's access roads and an electrical collection line will cross the Verizon easement (Appendix 5-A, Sheet PV-C.02.10). The Applicant is coordinating with Verizon to establish an easement agreement for the relocated telecommunications line and crossing agreements for the access road and electrical collection line. Additionally, the location of the aboveground electrical collection lines shown on Figure 3-1 and Figure 3-2 are required to be located aboveground to ensure the groundwater protection liner located under the existing coal storage pile area and SWDA II landfill is not impacted.

(4) Locations of Known or Suspected Sub-Surface Drainage Systems

The Applicant has prepared a Drainage Remediation Plan (Appendix 15-B) to address inadvertent damages to surface or sub-surface drainage as detailed in section 15(d) of this exhibit. The plan addresses potential impacts to drainage systems and a process for identification and repair of the drainage features. County research conducted to identify locations of drain tiles on the Project Site identified one area within the Facility Site that has the potential to have one or more drain tiles present. The communications log provided in Appendix 15-C includes documentation of the outreach and research conducted and includes a copy of a historical sketch of the area located in between development Areas 4 and 5 of the Facility Site where drain tiles were documented. This information was provided by the USDA Natural Resources Conservation Service Niagara County office, which maintains drain tile data for the county. Appendix 5-A, Sheets PV-C.02.04 and PV-C.02.05, and Figure 15-7 show the approximately location within the Facility Site where drain tiles could be encountered during construction. Although not anticipated to be impacted by construction, these engineering drawings and figure also identify a potential location of drain tiles off-site and outside the Facility Site, between Area 4 and Area 5. To address any potential impacts to drain tiles that occur during

construction, the Applicant will implement the Drainage Remediation Plan provided as Appendix 15-B. Engineering drawings include a note about their potential location and to use caution during construction in this area to avoid damage. If damage occurs, the broken tiles will be replaced in kind as described in the Appendix 15-B and as shown on Appendix 5-A, Sheet PV-C.08.03. No additional locations of sub-surface drainage systems, surface drains, or irrigation lines have been identified within the Facility Site, based on research conducted in coordination with county representatives or communication with landowners and tenant farmers. In the event that any additional locations of these features are identified within the Facility Site before or during construction implementation of the Drainage Remediation Plan will address these impacts. Figure 15-7 provides an overview of drainage ditches mapped on the Project Site, as well as USGS National Hydrology Dataset drainages for streams and artificial paths and connectors. Figure 14-2 provides a detailed map of the wetlands and Figure 13-2 provides a detailed map of waterbodies delineated on the Project Site.

(5) United States Department of Agriculture Soil Mapping for the Facility Site

USDA soil mapping for the 5-mile study area is depicted in Figure 15-8, with additional soil mapping detail provided on Figure 10-3 in Exhibit 10. Table 15-6 provides a summary of the types and acreages of soils mapped by USDA Natural Resources Conservation Service in the Facility Site and 5-mile study area, including identification of each soil types corresponding MSG. Collamer silt loam, 2–5% slopes (CnB) (MSG 3) is the most common soil type, comprising approximately 22.9% of Facility Site soils; followed by Niagara silt loam, 0–2% slopes (NaA) (MSG 4) (approximately 21.4%) and Rhinebeck silt loam, 0–2% slopes (RbA) (MSG 5) (approximately 11.0%).

(6) New York State Agricultural Land Classification Mineral Soil Groups 1 through 10 for Impacted Agricultural Areas within the Facility Site

Figure 15-9 shows the MSGs 1–8 mapped within the Facility Site with the infrastructure details overlain. Except for MSGs 9 and 10, all potential MSGs, including MSGs 1–4 are present within the Facility Site. Areas of MSG 9 are mapped outside of the Facility Site, but within the 5-mile study area (Table 15-6). Active agricultural lands (i.e., land in active agriculture production defined as active three of the last five years) within MSG 1–4 impacted by the Facility are summarized in Table 15-7. Some areas mapped as MSG 1–4 do not correlate to field-verified agricultural lands.

Table 15-6. Mapped Soils within the Facility Site and Study Area

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site ¹	Percent (%) of Facility Site ¹	Acres in Study Area	Percent (%) of Study Area
Ad	Alluvial land	Not prime farmland	9	-	-	41.5	0.1%
Af	Altmar loamy fine sand	Farmland of statewide importance	4	-	-	224.8	0.5%
Am	Altmar gravelly fine sandy loam	Farmland of statewide importance	4	-	-	382.9	0.9%
AnA	Appleton gravelly loam, 0–3% slopes	Prime farmland if drained	5	-	-	5,042.0	12.2%
ApA	Appleton silt loam, 0–3% slopes	Prime farmland if drained	5	13.8	12.0%	3,800.2	9.2%
ArB	Arkport very fine sandy loam, 0–6% slopes	All areas are prime farmland	3	17.8	2.5%	194.2	0.5%
ArC	Arkport very fine sandy loam, 6–12% slopes	Farmland of statewide importance	4	7.3	1.0%	96.3	0.2%
AsA	Arkport fine sandy loam, gravelly substratum, 0–2% slopes	All areas are prime farmland	2	-	-	277.7	0.7%
AsB	Arkport fine sandy loam, gravelly substratum, 2–6% slopes	All areas are prime farmland	3	-	-	166.4	0.4%
BoA	Bombay fine sandy loam, 0–2% slopes	All areas are prime farmland	2	-	-	226.8	0.5%

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site ¹	Percent (%) of Facility Site ¹	Acres in Study Area	Percent (%) of Study Area
BoB	Bombay fine sandy loam, 2–6% slopes	All areas are prime farmland	2	-	-	243.4	0.6%
Ca	Canandaigua silt loam	Not prime farmland	7	1.5	0.2%	445.0	1.1%
CcA	Cayuga and Cazenovia silt loams, 0–2% slopes	All areas are prime farmland	3	-	-	48.0	0.1%
CcB	Cayuga and Cazenovia silt loams, 2–6% slopes	All areas are prime farmland	3	1.2	0.2%	49.7	0.1%
CgA	Cazenovia gravelly silt loam, shale substratum, 0–3% slopes	All areas are prime farmland	4	-	-	237.1	0.6%
CgB	Cazenovia gravelly silt loam, shale substratum, 3–8% slopes	All areas are prime farmland	4	-	-	85.6	0.2%
Ch	Cheektowaga fine sandy loam	Farmland of statewide importance	7	-	-	205.0	0.5%
CIA	Churchville silt loam, 0–2% slopes	Prime farmland if drained	5	-	-	117.8	0.3%
CmA	Claverack loamy fine sand, 0–2% slopes	All areas are prime farmland	3	15.9	2.3%	586.7	1.4%
CmB	Claverack loamy fine sand, 2–6% slopes	All areas are prime farmland	3	23.0	3.3%	1,352.1	3.3%

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site ¹	Percent (%) of Facility Site ¹	Acres in Study Area	Percent (%) of Study Area
CnA	Collamer silt loam, 0–2% slopes	All areas are prime farmland	2	51.1	7.3%	762.0	1.8%
CnB	Collamer silt loam, 2–6% slopes	All areas are prime farmland	3	160.3	22.9%	1,481.7	3.6%
CoB	Colonie loamy fine sand, 0–6% slopes	All areas are prime farmland	4	2.3	0.3%	120.5	0.3%
Cs	Cosad fine sandy loam	Prime farmland if drained	4	2.3	0.3%	728.8	1.8%
DuB	Dunkirk silt loam, 2–6% slopes	All areas are prime farmland	2	13.0	1.9%	90.1	0.2%
DuC3	Dunkirk silt loam, 6–12% slopes, eroded	Not prime farmland	5	20.4	2.9%	101.2	0.2%
DvD3	Dunkirk and Arkport soils, 12–20% slopes, eroded	Not prime farmland	6	2.4	0.3%	20.3	0.0%
EIA	Elnora loamy fine sand, 0–2% slopes	All areas are prime farmland	4	-	-	623.7	1.5%
EIB	Elnora loamy fine sand, 2–6% slopes	All areas are prime farmland	4	1.1	0.2%	505.6	1.2%
Fr	Fredon gravelly loam	Prime farmland if drained	6	2.6	0.4%	824.9	2.0%
GnA	Galen very fine sandy loam, 0–2% slopes	All areas are prime farmland	2	5.9	0.8%	490.0	1.2%

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site ¹	Percent (%) of Facility Site ¹	Acres in Study Area	Percent (%) of Study Area
GnB	Galen very fine sandy loam, 2–6% slopes	All areas are prime farmland	3	5.6	0.8%	174.1	0.4%
Ha	Hamlin silt loam	All areas are prime farmland	1	11.1	1.6%	432.5	1.0%
HgA	Hilton gravelly loam, 0–3% slopes	All areas are prime farmland	2	-	-	3,303.2	8.0%
HgB	Hilton gravelly loam, 3–8% slopes	All areas are prime farmland	2	7.9	1.1%	584.5	1.4%
HIA	Hilton silt loam, 0–3% slopes	All areas are prime farmland	2	6.7	1.0%	407.4	1.0%
HIB	Hilton silt loam, 3–8% slopes	All areas are prime farmland	2	15.7	2.3%	266.9	0.6%
HoA	Howard gravelly loam, 0–3% slopes	All areas are prime farmland	2	-	-	655.0	1.6%
HoB	Howard gravelly loam, 3–8% slopes	All areas are prime farmland	2	-	-	289.4	0.7%
HoC	Howard gravelly loam, 8–15% slopes	Farmland of statewide importance	5	-	-	8.4	0.0%
HsB	Hudson silt loam, 2–6% slopes	All areas are prime farmland	3	17.7	2.5%	577.4	1.4%
HtC3	Hudson silty clay loam, 6–12% slopes, eroded	Not prime farmland	5	-	-	1.5	0.0%
HuF3	Hudson soils, 20–45% slopes, eroded	Not prime farmland	9	-	-	0.0	0.0%

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site ¹	Percent (%) of Facility Site ¹	Acres in Study Area	Percent (%) of Study Area
LaB	Lairdsville silt loam, 0–6% slopes	Farmland of statewide importance	4	-	-	19.2	0.0%
Ld	Lamson very fine sandy loam	Not prime farmland	7	-	-	383.3	0.9%
Lg	Lamson fine sandy loam, gravelly substratum	Not prime farmland	7	-	-	264.3	0.6%
Lo	Lockport silt loam	Farmland of statewide importance	5	-	-	1,913.5	4.6%
Ma	Madalin silt loam, 0–3% slopes	Farmland of statewide importance	7	5.9	0.8%	217.5	0.5%
Md	Madalin silt loam, loamy subsoil variant	Farmland of statewide importance	7	-	-	118.4	0.3%
Me	Made land	Not prime farmland	9	-	-	35.9	0.1%
Mf	Massena fine sandy loam	Prime farmland if drained	5	-	-	564.9	1.4%
Mn	Minoa very fine sandy loam	Prime farmland if drained	5	3.3	0.5%	955.5	2.3%
Ms	Muck, shallow	Not prime farmland	6	-	-	53.4	0.1%
NaA	Niagara silt loam, 0–2% slopes	Prime farmland if drained	4	150.5	21.5%	1,583.8	3.8%
NaB	Niagara silt loam, 2–6% slopes	Prime farmland if drained	4	23.8	3.4%	39.2	0.1%
OdA	Odessa silty clay loam, 0–3% slopes	Prime farmland if drained	5	-	-	4.5	0.0%
OnB	Ontario loam, 3–8% slopes	All areas are prime farmland	2	-	-	7.4	0.0%
OnC	Ontario loam, 8–15% slopes	Farmland of statewide importance	5	-	-	3.4	0.0%

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site ¹	Percent (%) of Facility Site ¹	Acres in Study Area	Percent (%) of Study Area
OnD3	Ontario loam, 15–30% slopes	Not prime farmland	8	-	-	25.7	0.1%
OoA	Ontario loam, 0–3% slopes, bedrock substratum	All areas are prime farmland	2	-	-	3.6	0.0%
OoB	Ontario loam, 3–8% slopes, bedrock substratum	All areas are prime farmland	3	-	-	4.5	0.0%
OsA	Otisville gravelly sandy loam, 0–3% slopes	Not prime farmland	5	-	-	16.1	0.0%
OsB	Otisville gravelly sandy loam, 3–8% slopes	Not prime farmland	5	-	-	4.0	0.0%
OvA	Ovid silt loam, 0–2% slopes	Prime farmland if drained	5	8.3	1.2%	830.4	2.0%
OvB	Ovid silt loam, 2–6% slopes	Prime farmland if drained	5	2.3	0.3%	202.4	0.5%
PsA	Phelps gravelly loam, 0–5% slopes	All areas are prime farmland	2	-	-	1,142.4	2.8%
Pt	Pits, gravel	Not prime farmland	0	-	-	29.7	0.1%
RbA	Rhinebeck silt loam, 0–2% slopes	Prime farmland if drained	5	76.3	11.0%	1,903.0	4.6%
RbB	Rhinebeck silt loam, 2–6% slopes	Prime farmland if drained	5	12.1	1.7%	345.4	0.8%
St	Stafford loamy fine sand	Farmland of statewide importance	5	-	-	67.4	0.2%

Map Unit Symbol	Map Unit Name	Farmland Classification	MSG	Acres in Facility Site ¹	Percent (%) of Facility Site ¹	Acres in Study Area	Percent (%) of Study Area
Su	Stafford loamy fine sand, gravelly substratum	Farmland of statewide importance	5	-	-	465.5	1.1%
Sw	Sun silt loam	Farmland of statewide importance	7	-	-	3,448.8	8.4%
W	Water	Not prime farmland	0	1.0	0.1%	126.8	0.3%
Wa	Wayland soils complex, 0–3% slopes, frequently flooded	Not prime farmland	8	8.3	1.2%	234.4	0.6%

1 – A dash “-” in this column indicates soil type not present in the Facility Site.

Table 15-7. Acres of the Project Parcels, Project Site and Facility Site within Active Agricultural Land Parcels and Mineral Soil Group

Mineral Soil Group	Project Parcels (1,784 acres)		Project Site (1,396 acres)		Facility Site (700 acres)	
	Acres	%	Acres	%	Acres	%
1	5.1	0.2	5.1	0.4	5.0	0.7
2	76.0	4.3	75.8	5.4	68.1	9.7
3	125.2	7.0	124.8	8.9	120.8	17.3
4	75.2	4.2	75.0	5.4	68.2	9.7
Total	281.5	15.7	280.6	20.1	262.1	37.4

A total of 262.1 acres of the Facility Site (approximately 37.4% of the Facility Site) contains active agricultural land that is also mapped as MSG 1–4 (Table 15-7). Table 15-8 provides a summary of temporary and permanent impacts within active agricultural land that is also mapped as MSG 1–4. Permanent impacts and activities occur in 2% of the LOD and temporary impacts occur in 98% of the LOD.

Table 15-8. Facility Site Temporary and Permanent Impacts within Active Agricultural Land mapped as Mineral Soil Group 1–4.

Facility Infrastructure or Activity	Acres	% of Limit of Disturbance
Temporary Impacts and Activities		
General disturbances (i.e., foot and vehicle traffic, general construction activities)	32.9	9%
Grading	4.6	1%
Installation of photovoltaic racking	280.6	76%
Laydown yards	21.0	6%
Tree/shrub clearing and grubbing	11.3	3%
Stormwater filter strips	8.3	2%
Trenching for MV lines	1.6	0%
Vegetative screening	1.6	0%
Permanent Impacts and Activities		
Inverter pads	0.1	0%
Access roads	5.6	2%

In all instances where permanent or temporary impacts will occur on active agricultural lands within NYS Agricultural Land Classified MSGs 1–4, the Applicant agrees to: (i) Construct the Facility consistent with the Guidelines, to the maximum extent practicable; and (ii) hire an independent, third-party agricultural monitor to oversee compliance with agricultural conditions and requirements, including the Facility Agricultural Plan (Appendix 15-A) required pursuant to

§900-2.16(c), and the Drainage Remediation Plan (Appendix 15-B) required pursuant to §900-2.16(d), both of which will be approved by the ORES.

Exhibit 24 provides additional discussion on Facility impacts to prime farmland, prime farmland if drained, and farmland of statewide importance; and these resources are depicted on Figure 24-1 and Figure 24-2. Table 15-9 summarizes the acreages and percentages of these farmland soil types mapped by USDA within each of the parcels associated with the Facility, which shows that prime farmland soils comprise 25% or more of all Facility parcels (percentage of mapped prime farmland soils for all Facility parcels ranges from 30.1%–58.5%). The Facility cannot be constructed to comply with the Town of Somerset Solar Law §205-133(D) (1) for Tier 4 solar energy systems which does not permit such systems on any agricultural property, lot or parcel that contains 25% or more land classified as prime farmland or farmland of statewide importance. Non-compliance with this portion of the Town’s Solar Law is discussed further in Exhibit 24, Section 24(c).

Table 15-9. Prime Farmland and Farmland of Statewide Importance for Facility Site Parcels

Agricultural Soil Classification	Parcel 7.00-3.28		Parcel 8.00-1-1.11		Parcel 8.00-1-1.12		Parcel 8.00-1-1.2		Parcel 8.00-1-38		Total Acres
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	
Prime Farmland	148.3	53.5%	362.6	58.5%	11.0	30.1%	406.7	49.9%	14.9	45.8%	943.4
Prime Farmland if Drained	93.0	33.5%	216.9	35.0%	21.3	58.2%	366.3	45.0%	17.6	54.2%	715.2
Farmland of Statewide Importance	11.4	4.1%	10.6	1.7%	4.3	11.7%	7.9	1.0%	0.0	0.0%	34.2
Not Prime Farmland	24.7	8.9%	30.0 ¹	4.8%	0.0	0.0%	33.5 ¹	4.1%	0.0	0.0%	88.2
Total²	277.4	100%	620.1	100%	36.6	100%	814.4	100%	32.5	100%	1,780.9²

1 - Total acres for non prime farmland soils in these parcels also includes areas not having any agricultural soil type designation.

2 - Total acres for soils in this table may differ from reported total acreage for all parcels due to some areas not having any soil type mapped.

Solar facilities are also a reversible land-use, and at the end of the Facility life, the land will be fully decommissioned and restored, allowing for temporarily disturbed agricultural lands to be returned to agricultural use. During Facility operation, the vegetation management practices (e.g., no-tillage, deep-rooted perennial vegetative cover) also will contribute to improving soil health throughout the Facility. Therefore, at the end of the Facility's 35-year operating life the soil is anticipated to be more productive, as it will have increased soil organic matter, improved aggregate stability and water holding capacity, and increased drought and flood resistance.

15(c) Agricultural Plan

An Agricultural Plan was prepared by the Applicant to address impacts and mitigation to active agricultural lands, as defined in §900-2.16(c), within NYS Agricultural Land MSGs 1–4 and to conform with the Guidelines (Appendix 15-A). As noted in Appendix 15-A, the Applicant will, as possible and feasible, stockpile all topsoil as close to where it was removed, and keep topsoil separate from other excavated materials. The Agricultural Plan includes the use of a third-party Environmental Monitor (EM) that is qualified as an agricultural monitor in accordance with §§900-6.4(b)(4), 6.4(s). The EM will verify and record locations of stripped topsoil.

Based on USDA NASS CDL mapping of agricultural lands an estimated 573 acres of agricultural land estimated to be impacted by construction of the Facility, the following summarizes impacts to agricultural lands mapped within the 5-miles study area, Project Parcels, Project Site, and Facility Site:

- Approximately 3% of the 21,269 acres of agricultural land identified within the 59,842-acre, 5-mile study area.
- Approximately 60% of the 1,062 acres of agricultural land within the 1,784-acre Project Parcels.
- Approximately 64% of the 890 acres of agricultural land within the 1,396-acre Project Site.
- Approximately 82%⁶ of the agricultural lands within the 700-acre Facility Site.

The Town of Somerset Solar Law identifies a max height of 20 feet for Tier 3 solar energy systems, as measured from the highest natural grade below each panel, but there is the ability to have this waived by Planning Board if the panels are raised to accommodate agricultural purposes (§205-112(A)(3)). Panel heights of 25 feet or greater, that would be needed to allow for continued agricultural practices and uses below the panels, are not suitable for the Facility Site due the scale

⁶ This percentage is based on USDA NASS CDL mapping. The percentage based on active agricultural lands as verified based on field observations and confirmation with the landowner is less, 53.9%.

and size of the project and additional costs associated with this alternative infrastructure. Additionally, selection and use of taller panels would increase the visibility of the Facility within the viewshed, and likely increase the amount of glare received by surrounding residents and travelers along local roadways. The panels selected for the Facility took these factors into consideration and those selected minimize the potential for significant viewshed and glare impacts. As demonstrated in Appendix 15-E, the Applicant has committed to incorporating agricultural co-use on lands within the Project Site that will remain in agricultural use during the life of the Facility.

Although a full analysis of potential alternative layouts is not required by this part, the Applicant has demonstrated minimizing permanent impacts to agricultural land and soils through maximizing use of open areas in the site plan, including repurposing of previously disturbed lands associated with the former coal plant and use of agricultural fields to minimize tree/shrub clearing and grubbing. The site design prioritized avoidance of impacts to surface waters and wetlands as discussed in Exhibit 13 and Exhibit 14, respectively. An alternatives discussion is provided in Exhibit 9, Appendix 9-A (January 26, 2023 correspondence with the Office of Parks, Recreation and Historic Preservation), which includes a map of the original site plan for a 200 MW project on the Project Site. As noted in Appendix 9-A, the Applicant does not have the power of eminent domain, and as such, companies without eminent domain do not have the authority to procure alternative solar sites. The Applicant worked with the willing landowners of the Project Parcels and did not seek out additional agricultural lands, or other lands, for potential expansion of the suitable development areas identified. Additionally, not all of the available agricultural land on the Project Parcels is being used for the Facility, with approximately 23.8 acres of active agricultural land remaining for continued farming and agricultural use (Figure 15-5 and Table 15-5). As part of the planning and siting process, the Applicant has generated a layout that consolidates arrays, minimizes setbacks and array spacing, and avoids wetlands and surface waters to the maximum extent practicable. The current layout and design also considered vegetation clearing and removal of wildlife habitat in balancing the extent of impacts to natural resources as well as agricultural lands. Permanent impacts to MSGs 1–4 for the inverter pads, access roads, and the Facility Substation footprint totals approximately 11.2 acres. Temporary impacts from all other construction activities to MSGs 1–4 totals approximately 441 acres.

As a part of site selection, preliminary evaluations were undertaken to consider factors to confirm the suitability of the selected Facility Site to meet the Applicants' development objectives. The

Applicant focused on the following site conditions and criteria that weighed upon the site being especially suitable for development of a solar facility:

- NYS along with the United States Environmental Protection Agency encourages renewable energy development on current or former industrial lands and the re-use of abandoned industrial sites. These projects not only advance cleaner and more cost-effective energy technologies, but also reduce the environmental impacts of energy systems. The Facility supports repurposing of a decommissioned, non-renewable electric generating facility (Somerset Station) for solar use.
- Proximity of adequate electrical interconnection was a factor considered by the Applicant in the selection of the Project Site for the Facility. The location of New York State Electric and Gas Corporation's 345-kilovolt Kintigh Substation on the Project Site allows for on-site electrical interconnection, and this feature was considered a favorable site attribute. The Kintigh Substation, located within the Project Site, is the Facility's point of interconnection to the transmission grid, with the gen-tie transmission interconnection line length limited to 159 feet. No transmission lines are required outside of the Project Site. This has limited environmental impacts from the transmission line connection through reusing previously disturbed lands and use of an existing substation facility for interconnection to the grid.
- Compatible land use was another factor considered by the Applicant in selection of the Project Site for the Facility. The Facility Site encompasses an area consisting of relatively open, flat parcels of adequate size to support a 125-MW solar energy project. Considering the former presence of the coal-fired power plant on a large portion of the Facility Site, the reuse of these land parcels for clean, renewable energy, is less impactful and potentially a more restorative land use. The predominance of open areas within the Facility Site also allows for maximizing sun exposure. The Facility Site's setting reflects a low density of surrounding development with considerable opportunity for buffering from surrounding land uses.
- Provision of clean distributed solar energy generated closer to end users increases efficiency and reduces carbon pollution compared to other fossil-fueled generation facilities and improves grid resiliency potentially curtailing the need for costly transmission investments. This directly supports the draft Scoping Plan developed by NYS Climate

Action Council which identifies a directive of having 6,000 MW of distributed solar energy generation by 2025⁷.

- The Project Site was identified as having a strong solar energy potential. The Applicant confirmed, through an initial screening process using statewide solar resource mapping, that the Facility Site does indeed have a strong solar energy potential. The area selected for development is primarily open (large portions having been previously developed and other areas containing open agricultural fields) and by maximizing use of these open areas for the Facility, tree/shrub clearing and associated environmental impacts could be minimized.
- The Project Site also was selected on the basis of willing landowners for a site containing sufficient acreage that was able to be secured, also allowing for siting of Facility features in a manner that minimizes impacts to natural resources and minimizes potential visual and noise impacts.
- During the early stages of the planning process, the Applicant identified limited environmental and engineering constraints associated with the Project Site. An initial screening review was conducted based on readily available public data to evaluate such issues as mapped wetlands (Exhibit 14), indicating that considerable usable area potentially existed, pending more detailed field evaluations. A significant portion of the Facility Site is already disturbed and has been used for industrial purposes including the former coal plant, landfill (SWDA II), and associated infrastructure. In addition, the surrounding roadway network appeared adequate to support delivery of equipment and construction activities; once the Facility is installed, little need for community services will result. Relatively little forest clearing would be necessary, thus minimizing potential impact to forest species habitat.

The selected Facility Site was, therefore, secured for additional evaluation and development of the Facility.

No reasonable and available alternative site for the Facility is owned or under option by the Applicant. NYS has established an aggressive renewable energy target, supported by NYS Energy Research and Development Authority's annual solicitations for such projects. Requiring a developer to forfeit its proposed Project Site, in favor of another site one of its affiliates is

⁷ New York State Climate Action Council. 2021. Draft Scoping Plan. 341 pp. Available online at: [Climate Action Council Draft Scoping Plan \(ny.gov\)](https://www.climactioncouncil.ny.gov/draft-scoping-plan). Accessed December 13, 2022.

developing for another Renewable Energy Credit contract, is a policy that would discourage renewable development, making it difficult for NYS to meet its renewables target. Therefore, sites owned or under option to the Applicants' affiliates slated for renewables development are not reasonable or available alternate locations.

15(d) Drainage Remediation Plan

A Drainage Remediation Plan to address inadvertent damages to surface or sub-surface drainage is included as Appendix 15-B, which includes:

- (1) A demonstration of the likelihood of impacts to surface of subsurface drainage and how the interruption of drainage may impact farmland within and outside of the Facility Site; and
- (2) An identification of methods of repair for damaged drainage features, should any occur during construction.

Impacts to surface and subsurface drainages are outlined in Exhibit 13 and Exhibit 14. Project components have been sited to avoid temporary or permanent impacts to surface waters to the maximum extent practicable. Certain construction activities have the potential to result in direct and/or indirect impacts to surface drainages, including surface waters that drain agricultural fields. These activities include the installation of access roads (and associated culverts), upgrading of existing access roads, installation of above-ground and buried electrical collection lines, and installation of fencing. Impacts related to the construction of new access roads and electrical collection line crossings will be minimized to the maximum extent practicable by utilizing existing crossings where feasible. As described in Exhibit 13, where HDD activities are proposed, best management practices, including those outlined the Facility's Preliminary Stormwater Pollution Prevention Plan (Appendix 13-B) will be implemented for protection of water resources. Additional best management practices for protection of surface and groundwater quality will be provided in the Facility's Spill Prevention, Control and Countermeasures Plan that will be prepared and submitted to ORES for approval prior to initiation of construction activities. Implementation of these plans, as well as hiring of an independent, third-party agricultural monitor and having a dedicated EM that oversees construction activities will ensure impacts to surface waters are avoided and minimized to the maximum extent practicable.

15(e) Agricultural Co-Use Utilization Plan

A conceptual co-use agricultural plan, Agrivoltaic Solutions Site Design, and analysis (Agricultural Co-Location – Initial Analysis) is provided in Appendix 15-E. The Applicant is considering sheep grazing as a co-use during Facility operations. The fenced solar areas (A-H) are potentially

grazeable, with exception to the areas formerly occupied by active coal production (Section B) and range from +/-35 acres to 175 acres. Much of the site is located on small crop and hay fields, with numerous fruit and/or nut orchards present. Once meadow habitat is established post-construction, sheep would be allowed to graze on a rotational basis throughout the Facility Site during the growing season. An expected stocking rate of four sheep per acre could be achieved. These flocks would be seasonally rotated through the individually fenced areas and could be moved among these smaller sections. It is realistic to expect that landowners, owning parcels between the project areas South of Route 18/Lake Road would not be interested in allowing sheep flocks to cross their land to rotate to another area (for example, from section E to section F, navigating through fruit tree operations). However, depending on the requirements of a potentially larger flock, trucking could be utilized to rotate the flock between grazing locations. Alternatively, the site could be grazed with smaller flocks separately in each area. This also will depend on the sheep flock owner/grazer preferences. Additionally, Section A could support another, larger, flock of sheep. Adherence to the Guidelines and implementation of best management practices to preserve agricultural soils disturbed and located throughout the Facility also will ensure agricultural lands are available for continued farming practices upon decommissioning of the Facility after its useful life, should the landowners choose to do so.

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