



**Mill Point**  
**SOLAR I PROJECT**

**ConnectGen Montgomery County LLC**

Mill Point Solar I Project

Matter No. 23-00034

**§ 900-2.9 Exhibit 8**

**Visual Impacts**

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Appendix 8-1. Visual Impact Assessment (VIA)

## Glossary of Terms

- Applicant:** ConnectGen Montgomery County LLC (ConnectGen), a direct subsidiary of ConnectGen LLC, is the entity seeking a siting permit for the Facility from the Office of Renewable Energy Siting (ORES) under Section 94-c of the New York State (NYS) Executive Law.
- Facility:** The proposed components to be constructed for the generation, collection and distribution of energy for the Project will include: photovoltaic (PV) solar modules and their rack/support systems; direct current (DC) and communications cables connecting the panels to inverters; the inverters, with their support platforms, control electronics, and step-up transformers; buried alternate current (AC) medium voltage collector circuits; fencing and gates around each array of modules; access roads; temporary laydown/construction support areas; a medium voltage-to-transmission voltage substation with associated equipment and fenced areas; a new 3-breaker ring bus point of interconnection switchyard (POI switchyard); two adjacent approximately 305 foot-long 345 kV transmission line segments to interconnect the new POI switchyard to the existing National Grid Marcy – New Scotland 345-kilovolt transmission line; and an operations and maintenance (O&M) building with parking/storage areas as well as any other improvements subject to ORES jurisdiction.
- Facility Site:** The tax parcels proposed to host the Facility, which collectively totals 2,665.59 acres.
- Point of Interconnection (POI) or POI Switchyard:** A new 3-breaker ring bus point of interconnection switchyard will be constructed adjacent to the existing National Grid Marcy – New Scotland 345-kilovolt transmission line; the substation will tie into the new POI switchyard via an overhead span and deliver power produced from the Facility onto the electric grid through two overhead spans tapping the National Grid-owned Marcy – New Scotland 345 kV transmission line. The POI switchyard is located off Ingersoll Road in the northeastern portion of the Facility Site.

- Limits of Disturbance (LOD):** The proposed limits of clearing and disturbance for construction of all Facility components and ancillary features are mapped as the LOD. The LOD encompasses the outer bounds of where construction may occur for the Facility, including all areas of clearing, grading, and temporary or permanent ground disturbance. This boundary includes the footprint of all major Facility components, defined work corridors, security fencing, and proposed planting modules, and incorporates areas utilized by construction vehicles and/or personnel to construct the Facility.
- Project or Mill Point Solar I** Collectively refers to permitting, construction, and operation of the Facility, as well as proposed environmental protection measures and other efforts proposed by the Applicant.
- Study Area:** In accordance with the Section 94-c Regulations, the Study Area for the Facility includes a radius of five miles around the Facility Site boundary, unless otherwise noted for a specific resource study or Exhibit. The 5-mile Study Area encompasses 96,784.84 acres, inclusive of the 2,665.59-acre Facility Site.

## Acronym List

3D	Three-Dimensional
AADT	Annual Average Daily Traffic
AC	Alternating Current
ASL	Above Sea Level
BLM	Bureau of Land Management
CAD	Computer-aided design
FEMA	Federal Emergency Management Agency
GIS	Geographic Information Systems
GPS	Global Positioning System
LiDAR	Light Detection and Ranging
LOS	Line-of-Sight
LSZ	Landscape Similarity Zones
NESC	National Electrical Safety Code
NLCD	National Land Cover Dataset
NPS	National Park Service
NRHP	National Register of Historic Places
NRI	Nationwide Rivers Inventory
NRT	National Recreation Trails
NYNHP	New York Natural Heritage Program
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	New York State Department of Transportation
NYSGPO	New York State GIS Program Office
OPRHP	Office of Parks, Recreation and Historic Preservation
ORES	Office of Renewable Energy Siting
OSHA	Occupational Safety and Health Administration
POI	Point of Interconnection
SGHAT	Solar Glare Hazard Analysis Tool
SHPO	State Historic Preservation Office
USCs	Uniform Standards and Conditions
USDA	United States Department of Agriculture
USDOI	United States Department of the Interior
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VIA	Visual Impact Assessment (see Appendix 8-1)
VP	Viewpoint
VSA	Visual Study Area

## **EXHIBIT 8            VISUAL IMPACTS**

### **8(a) Visual Impact Assessment**

A Visual Impact Assessment (VIA) was prepared for the Mill Point Solar I Project (Facility) to determine the extent and assess the significance of Facility visibility (Appendix 8-1). The VIA includes both quantitative and qualitative identification of visually sensitive resources, viewshed mapping, confirmatory visual assessment fieldwork, photo-simulations (also known as "visual simulations", "photographic overlaps", "photographic simulations", or "simulated views"; referred to herein as "photo-simulations" or "simulations") and proposed visual mitigation. In completing the VIA, local municipalities and State agencies were consulted and applicable guidance and information was incorporated into the assessment. This exhibit provides an abbreviated version of the VIA and addresses the issues presented herein.

#### ***(1) The Character and Visual Quality of the Existing Landscape***

The Facility is proposed within the Town Glen in Montgomery County, New York. In general, the Facility is sited within rural agricultural fields and does not infringe on large population centers, transportation corridors, and significant aesthetic resources. Geographically, most of the Facility is concentrated approximately 1.8 miles and 2.4 miles south of the Village of Fultonville and Village of Fonda, respectively. The closest community to the Facility is Square Barn Corners and the Hamlet of Glen, whereas the nearest city to the Facility is the City of Amsterdam located approximately 5.6 miles east. Refer to Section 3.0 of the VIA for more detailed information about the character and visual quality of the existing landscape within the Visual Study Area (VSA). Refer to Section 3 of the VIA (Appendix 8-1) for additional detail regarding the character and visual quality of the existing landscape.

#### ***Landform***

The VSA is in two physiographic regions, the Glaciated Low Allegheny Plateau and the Mohawk Valley. The Mohawk Valley passes through the northern portion of the VSA and is characterized as a corridor of irregular river valley that travels east to west between the Adirondack Park and the Glaciated Low Allegheny Plateau (Bryce 2010). Within the VSA, the Mohawk Valley landform consists of upland (north to south) of the Mohawk River. These upland areas reach elevations of approximately 572 feet above sea level (ASL) on Boshart Road and 524 feet ASL on Van Epps Road, the Mohawk River lowland is conveyed with a lesser elevation of 290 feet ASL (on Main Street) in the Village of Fonda. Generally, when in and around the Mohawk Valley lowlands, the

opportunity to experience far reaching views of the landscape is prohibited by upland topography. Conversely, upland areas near (north-south) the valley may furnish elevated positions for viewing the distant landscape.

Following south from the Mohawk Valley is the fringe of the Glaciated Low Allegheny Plateau, characterized by low rolling hills and flattened hilltops with a mosaic of farmland and woodlots spread throughout the area. This occurrence of variable terrain comprises much of the center and southern sections of the VSA with an elevational range from 690 feet ASL at the Hamlet of Glen to 1,035 feet ASL on Reynolds Road near the southern extents of the VSA. Lower elevations are noted on Ingersoll Road (463 feet ASL) and New York State Highway 30A (NY30A) north of the Hamlet of Glen (445 feet ASL).

The Facility Site contains elevations ranging from approximately 485 feet ASL to 725 feet ASL. Figure 4 of Appendix 8-1 has been prepared with United State Geologic Service (USGS) topographic mapping and can be reviewed to understand the general character of existing topographic variability in and around the VSA.

### ***Water***

Water bodies can be an important aesthetic feature of a landscape and may also provide recreation and tourism opportunities. From within the Mohawk Valley Lowlands, the Mohawk River is the most prominent water feature in the VSA. This river horizontally bisects the northern section of the VSA and separates jurisdictional boundaries of the Villages of Fonda and Fultonville. The Mohawk River originates in the valley between the western Adirondacks and the Tug Hill Plateau and flows 140 miles to the east where it joins the Hudson River (NYSDEC n.d.).

The Schoharie Creek (river) is a tributary to the Mohawk River and is found meandering along the eastern border of the VSA. The Schoharie Creek is included in the United States National Park Service (NPS) Nationwide Rivers Inventory (NRI) for its natural, recreational, and geological features. NRI rivers are potential candidates for inclusion in the National Wild and Scenic River System.

Several smaller tributary creeks identified within the VSA that contribute to the Mohawk River are known as the Van Wie Creek, Briggs Run Creek, Cayadutta Creek, Danascara Creek, Revine Creek, Auries Creek, and Irish Creek. Several smaller (man-made) ponds are located on rural and agricultural properties throughout the VSA and are predominantly on private land south of the Mohawk River.



## ***Land Use and Development***

For more information regarding land use and development with the VSA, see Section 3.4 through 3.6 of the VIA. A summary of land use within the VSA is further provided below as follows.

### ***Transportation***

Roadways are generally publicly accessible and provide an opportunity for viewers to observe their surrounding environment and landscape. Determining the characteristics of a travel route assists with identifying the potential viewer types, frequency of view, as well as traffic volume. See Section 3.4 of the VIA for more detailed information about transportation in the VSA.

#### ***NY I-90***

With an Annual Average Daily Traffic (AADT) approximately ranging from 23,637 to 25,412, the most traversed roadway within the VSA is NY I-90. This transportation corridor is defined as a Principal Arterial functional class, which is described as roads that offer long-distant traveling, high levels of mobility, and a connection to major urban areas. Typically, these roadways confine access to limited areas and are valued for their beneficial impacts to the economy, travel, and tourism.

Paralleling a segment of the Mohawk River, NY I-90 spans 426 miles from Buffalo to New York and serves as a national travel route connecting the west coast to the east coast (Washington to Massachusetts). In the VSA, NY I-90 follows along the lowlands of the Mohawk Valley and intersects through the northern extents of the VSA. Entry points to NY I-90 are located on Riverside Drive in the Village of Fultonville. NY I-90 also offers expedited travel speeds of up to 65 miles per hour (mph) with minimal disruptions as well as providing distant traveling to other states or regions.

#### ***New York State Highway 5 (Revolutionary Trail Scenic Byway)***

New York State Highway 5 (NY5) is identified as a Minor Arterial functional class with an AADT of approximately 4,089. NY5 supports relatively uninterrupted travel to larger towns and highways, as well as providing a network to interstate (Arterial Roads) and intercounty service. Found in the northern section of the VSA, NY5 generally runs parallel to NY I-90 through the Village of Fonda to Tribes Hill and is found north of the Mohawk River. NY5 is recognized by the New York State Department of Transportation (NYSDOT) as the Revolutionary Trail Scenic Byway, which spans roughly 158 miles east-to-west from Albany to Lake Ontario.

### NY5S

NY5S is classified as a Major Collector functional class. NY5S is oriented in an east-to-west manner and is located adjacently south of the Mohawk River and NY I-90 (in the north portion of the VSA) within the Mohawk Valley. NY5S is designated as a State Bicycle Route and is slightly less utilized by vehicles (as compared to NY5) with an approximate AADT of 3,759. From the eastern boundary of the VSA, NY5S interconnects the Hamlet of Auriesville to the Village of Fultonville and to Stone Ridge in the west.

### NY30A

NY30A is a Minor Arterial functional class and has an approximate AADT of 2,445. In the VSA, NY30A functions as a north to south transportation route connecting the Villages of Fonda and Fultonville to the Hamlet of Glen. Overall, NY30A sustains less traffic and travelers compared to NY5, NY5S, and NY I-90.

In the VSA, a small segment of NY30A is designated as the Adirondack Trail Scenic Byway. This brief section of roadway initiates at the intersection of Broadway Street and Main Street in the Village of Fonda and follows north approximately 181-miles through the Adirondack Park to the terminus at the Village of Malone.

### Local Roads

Local roads consist of all roads not defined as arterials or collectors that primarily provide access to land with little or no through movement and accommodate travel over shorter distances. Local roads in the VSA are generally rural in nature and provide one travel lane in each direction with limited shoulder and roadside treatments.

Some examples of local roads proximal to the Facility Site are identified as Auriesville Road, Fisher Road, and Ingersoll Road. These roads range from an AADT of 99 (Ingersoll Road) to 527 (Auriesville Road). This AADT data provides useful information for generalizing the anticipated number of users that travel on local roads, such that the frequency and volume of users traversing on local roads is significantly less than other roadways in the VSA (in comparison to NY I-90, NY5, NY5S, and NY30A). Other local roads adjacent to the Facility include Egelston Road, Mile Level Road, Mary's Lane, and Van Epps Road.

Additional information regarding the transportation analysis performed on existing conditions in the vicinity of the Facility Site, including an evaluation of construction and operation of the Facility, can be found in Exhibit 16 Transportation Effects.

***Community/Residential***

The 2-mile VSA is predominantly within the Town of Glen, with a lesser amount intersecting the Towns of Mohawk, Root, and Florida. The VSA also includes several other local communities (see Section 3.1 of VIA for more detailed information about communities in the VSA).

To convey information pertaining to population densities in the VSA, population data derived from the U.S. Census Bureau (2020 Decennial Census) is provided below in Table 8-1, Population of Communities within VSA. This population data does not account for interstate travelers nor national travelers that may visit the region or travel through to reach other destinations. To provide further context and scale of the VSA population data in Table 8-1, the City of Amsterdam is located approximately 5.6 miles east of the Facility and contains an estimated population of 18,219.

**Table 8-1. Population of Communities within the VSA**

<b>Town/Village</b>	<b>Population (2020 Estimates)</b>
Town of Mohawk	3,572
Town of Glen	2,536
Town of Root*	2,013
Town of Florida*	2,667
Tribes Hill* (Census Designated Place)	937
Village of Fultonville	742
Village of Fonda	668
<i>*Denotes communities/municipalities that are minorly intersected the 2-mile VSA.</i>	

According to Table 8-1, approximately 29% of the Town of Glen's population resides within the Village of Fultonville, and 19% of the Town of Mohawk's population resides within the Village of Fonda. The remaining percentage of population are typically found in smaller communities (hamlets or census designated places), and a lesser extent of population is described as rural-residential where dwellings may be found punctuated between large expanses of agricultural land.

Rural-residential development found within the VSA primarily consists of one-story to two-story dwellings located within the vicinity of local or county roads. These dwellings are often positioned with a reasonable amount of space between each neighboring property. Contrariwise, the Villages of Fonda and Fultonville, and the Census Designated Place (CDP) of Tribes Hill contain a dense concentration of dwellings and structures within a small, confined area. As shown in Table 8-2 below, the Villages of Fonda and Fultonville, and the CDP of Tribes Hill contain the most concentrated number of housing units within the VSA, which means a higher density of viewers is possible. The character of these communities is documented as viewpoint (VP) photographs found in Attachment 2 of Appendix 8-1. Overall, the amount of population in the VSA is less compared to other more populous regions in New York State.

Total housing units of smaller communities were sourced from the Census Bureau. Below, Table 8-2 conveys approximate housing units for each community in and around the VSA.

**Table 8-2. Housing Density of Communities within the VSA**

<b>Community</b>	<b>Total Approximate Housing Units*</b>	<b>Census Tract</b>	<b>Census Block</b>
Tribes Hill (Census Designated Place)	463	072100	4072, 4073, 4074
		072200	1000, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 2052, 2055, 2056
Village of Fultonville	328	072700	1003, 1004, 1005, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1023, 1024, 1026, 1027, 1033, 1034, 1035, 1036, 1037, 1038, 1039
Village of Fonda	354	072200	3001, 3009, 3010, 3011, 3012, 3015, 3016, 3017, 3018, 3019, 3021, 3022, 3023, 3024, 3025, 3026, 3027, 3028, 3029, 3030, 3031, 3032, 3033, 3041, 3042, 4024
Stone Ridge (Census Designated Place)	110	072700	3010, 3011, 3014, 3015, 3016, 3017, 3020, 3021
Hamlet of Glen	88	072700	2026, 2028, 2035, 2034, 2047, 2052, 2072
Hamlet of Auriesville	39	072700	2014, 2015
Berryville	15	072200	4020, 4021, 4029
Square Barn Corners	13	072700	1056, 2029, 2030, 2031
*These address counts reflect the final counts of Housing Units (including transitory units) and group quarters for the 2020 Census.			

According to Table 8-2, communities with the most concentrated housing units in the VSA are listed as Tribes Hill, Fonda, and Fultonville. Lesser populated communities include the Hamlets of Auriesville and Glen, and minor civil divisions (Stone Ridge, Berryville, and Square Barn Corners). At 0.22-miles, the Hamlet of Glen is the closest hamlet to the Facility.

- Communities that fall within 0.5 miles of Facility: Towns of Glen and Mohawk, Village of Fultonville, Hamlets of Glen and Auriesville, and minor civil division of Square Barns Corners.
- Communities that fall between 0.5 and 2.0 mile of Facility: Towns of Root and Florida, Village of Fonda, and minor civil divisions of Berryville, Stone Ridge, and Tribes Hill.

One Potential Environment Justice Area (PEJA) was identified within the VSA. The PEJA, Census Tract 727, Block Group 2 is bounded by the Town of Glen and comprises a total of 24.16 square miles. Environmental justice efforts focus on improving the environment in communities, specifically minority and low-income communities, and addressing disproportionate adverse environmental impacts that may exist in those communities. PEJAs are defined by 6 New York Codes, Rules, and Regulations (NYCRR) Section 487.3 as areas with populations that meet one or more of the following thresholds:

- 51.1 percent or more of the population in an urban area reported themselves to be members of minority groups; or
- 33.8 percent or more of the population in a rural area reported themselves to be members of minority groups; or
- 23.59 percent or more of the population in an urban or rural area had household incomes below the federal poverty level.

Please see Exhibit 19, Environmental Justice, for more information regarding PEJAs.

### ***Existing Energy Infrastructure***

Aboveground utility infrastructure of varying heights, materials, and configurations may be seen within the VSA and is as follows:

- Marcy – New Scotland 345 kV transmission line (The Central East Energy Connect Project) – Spanning from the Town of Marcy to the Town of New Scotland. Within the VSA, this existing 345 kV transmission line traverses through the Towns of Mohawk and Glen. The Facility is proposing to interconnect into this transmission line (see Section 2.0, Facility Characteristics and Definitions, of Appendix 8-1 for more information).
- Van Epps & Mohawk View Community Solar – Eden Renewables – Has recently (2022) constructed two adjacent solar farms consisting of 5 MW of renewable energy each with an energy storage system located on the western side of 677 Van Epps Road in the Town of Glen.

### ***Publicly Known Proposed Land Uses***

To determine if other publicly known proposed land uses are proposed within the VSA, the Applicant reviewed publicly available information, including town documents, public notices, and town board meeting minutes, and consulted with the Town of Glen (Exhibit 2 and Exhibit 3, Appendix 3-5). Additionally, visual stakeholders were solicited through the visual outreach initiative (discussed Section 6.1 and Section 7.3.2 of the VIA, Appendix 8-1) to identify potential areas of proposed non-project development. No proposed land uses were identified through the visual outreach initiative.

As available in Section 3(i), Publicly Known Proposed Land Uses, of Exhibit 3, two land uses are proposed within the VSA and are identified below:

- 2621 State Highway 5S Solar Project: a 5MW community solar farm proposed by New Leaf Energy.
- Mill Point Solar II Project (ConnectGen Montgomery County LLC): a 100MW, utility-scale solar energy facility proposed by ConnectGen Montgomery County LLC.

### ***Distance Zones***

Please review Section 4.0 of the VIA for a discussion of Distance Zones established within the VSA.

Distance zones were established within the VSA for assessing and determining visual effects over discrete distances and are required as cited in Section 900-2.9 (b)(1) of the 94-c Regulations. Distance zones also provide information about each zone's influence on the level of detail and acuity of objects in the landscape over various distances. Consequentially, two distance zones have been incorporated within the 2-mile VSA:

- Distance Zone 1: Foreground (up to 0.5 miles from the viewer). This zone represents the closest views to the Facility. Clarity of individual details, textures, and the full spectrum of colors are typically discernable. Because of the proximal distance of this zone and the limited height of the solar panels, predicted areas of visibility are typically concentrated within this zone.
- Distance Zone 2: Middle ground to Background (0.5 to 2 miles from the viewer). In this zone from distances up to approximately 1-mile, individual trees and buildings can still be distinguished but textures become less sophisticated. Viewing from the extents of this distance zone is when forms begin to converge into homogenous shapes and colors. Often, atmospheric haze may affect color and contrast of objects during specific weather conditions, resulting in the landscape inheriting a very light blue color. From this distance the solar panels merge into single form or geometric shape. Slimmer components such as the fencing may become imperceivable at this distance. The amount of predicted visibility is usually less in this zone as screening effects of topography, trees, and buildings become more plentiful in the viewing field.

### ***Landscape Similarity Zones***

Please review Section 5.0 of the VIA for a discussion of Landscape Similarity Zones established within the VSA.

Discrete landscape features sharing a commonality in appearance are defined as Landscape Similarity Zones (LSZs). These zones may contribute to similar landscape character based on patterns of landform, vegetation, water resources, land uses, and user activity. Distinguishing LSZs provide additional context for evaluating viewer circumstances where relationships between viewer groups and visual experience can be made, as well as understanding the influence that the LSZs have on visibility.

This effort resulted in the definition of five LSZs within the VSA, as follows:



- Zone 1: Agricultural – This LSZ consists of open land that is predominantly used for cultivation or crops and/or livestock, or it may contain pasture, or left fallow. This LSZ exhibits variable upland terrain ranging from flat to rolling and includes less areas of shallow valley (lowland). In upland areas of this LSZ, there may be discernment of the surrounding and distant landscape, however, the number of the viewing public, as well as the frequency and duration of viewers, is likely low. Typically, sparsely located farmsteads and single residential dwellings intermittently dot this open landscape. Minor forms of vegetation are seen in this LSZ as single strand tree hedgerows separating quadrangular shaped agricultural lands in mosaic patterns. Larger existing man-made components intermittently dot this landscape and consist of utility poles, transmission structures, barn silos, and large farm complexes. Land use within this zone is limited to cultivation or livestock farming with a significantly less amount of habitation use. Several photographic examples of the Zone 1 Agricultural LSZ are available as VPs 4, 7, 10, 11, 19, 24, 36, 41, 45, 61, 68, and 76 in the Facility Photolog (Attachment 2 of Appendix 8-1).
- Zone 2: Forested – This zone represents lands comprised of mature deciduous and coniferous species, as well as mixed tree groups. Forested areas can encompass large swaths of land or be an isolated grouping of trees. Typically, forested lands are owned by private entities, or they may be protected and stewarded by a government agency. Those forested lands owned by public entities or organizations (e.g., NYSDEC) tend to offer the public recreational activities such as hunting, nature viewing, hiking, or camping. The type of viewing opportunities in this zone are typically confined to the forest itself, however, under specific situations it may be possible to view longer distances from forested land (e.g., views from an observation tower/deck or from a forested edge abutting an open field). Several photographic examples of the Zone 2 Forested LSZ are available as VPs 1, 49, 53, 54, 62 and 73. These viewpoints and associated photographs are presented in the Facility Photolog (Attachment 2 of Appendix 8-1).
- Zone 3: Developed – This zone includes villages, towns, cities, minor civil divisions, rural residential abutting roadways, and the NY I-90 transportation corridor. In rural settings, dwellings are characterized by a mix of single-family residences and farmsteads intermittently spaced along the vicinity of roads. These places with more condensed development may experience limited or confined views because of closely

located foreground objects, such as buildings or street trees that may impede distant views. Rural residential dwellings within the near vicinity of the Facility may experience visual change if topography or dense vegetation is not present. Several photographic examples of the Zone 3 Developed LSZ are available, but not limited to VPs 30, 31, 37, 52, 55, 56, 67, 74, and 89. To review the representative viewpoint locations and photography, please refer to the Facility Photolog (Attachment 2 of Appendix 8-1).

- Zone 4: Open – The Zone 4 Open LSZ includes miscellaneous other open land that may have minor development with less visually obstructive features such as minor expanses of barren land, land with short scrub-shrub vegetation, cemeteries, golf courses, paved lots, playgrounds, or small emergent wetlands. Viewing opportunities in this zone may be afforded because of the open landscape and lessened height of vegetation or lack thereof. Photographs exemplifying the characteristics of Zone 4 Open LSZ are shown as VPs 29, 31, 35, 40, 57, 63 and 75 in the Facility Photolog (Attachment 2 of Appendix 8-1).
- Zone 5: River Corridor – Zone 5 River Corridor LSZ represents two river corridors within the VSA: the Mohawk River and Schoharie Creek (river) found within the Mohawk Valley lowlands. This zone is described as an elongated body of water that is typically bounded by wooded riparian zones and a few brief intervals of concentrated development. Generally, observers in this zone have limited distant viewing opportunities when oriented perpendicular from the river where foreground vegetation and development often intervene. Contrariwise, distant landscape viewing opportunities are conducive when aligned with the corridor’s lateral length, or when facing parallel with the river. Examples of the Zone 5 River Corridor LSZ are noted as VPs 64 and 65 in the Facility Photolog (Attachment 2 of Appendix 8-1).

LSZ Zone 1 Agricultural is prominent at 53.7% of the VSA land area. LSZ Zone 2 Forested is comprises 31.9% of the VSA land area. The remaining LSZs are contributors of the VSA and include LSZ Zone 3 Developed (10.5% of the VSA), LSZ Zone 4 Open (1.6% of the VSA), and LSZ Zone 5 River Corridor (2.3% of the VSA).

## ***(2) The Visibility of the Facility***

The visibility of the Facility is objectively evaluated, documented, and discussed throughout the VIA. Several visual analyses were conducted to determine the extent of Facility visibility including

viewshed maps, line-of-sight (LOS) profiles, photo-simulations, and a Glare Analysis, as described in the VIA (Appendix 8-1). Each is briefly described as follows.

- Viewshed visibility analysis was completed to depict areas of predicted visibility for solar arrays within the two-mile VSA. This analysis, per Section 900.2.9 (b)(1), incorporates trees and buildings in the study area in addition to topography and gives the most reasonable and realistic depiction of the surrounding landscape. Two distinct viewshed analyses were prepared to evaluate components of the Facility: one analysis was completed for the solar arrays and its supporting infrastructure, and a second analysis completed for the substation, POI switchyard, and associated transmission structures (herein referred to as the “POI components”). As indicated by the viewshed results of the solar arrays, a total of 17.4% of limited predicted visibility is found within the VSA. The POI components viewshed determined that 10.15% of potential visibility may occur within the VSA. In general, predicted visibility may constitute a view of a solar array at a proximal distance, or it may only be a small fragment of the top of a solar panel at a great distance away. Therefore, the mere presence of predicted visibility should not always be indicative of adverse visual impact. No areas within the VSA are predicted to have full visibility of the Facility’s solar arrays. Full visibility is defined as an unobstructed view to the full extent of the Facility. For more information regarding the viewshed analyses, please see the following Sections of the VIA (Appendix 8-1): Section 7, Viewshed Analysis; Section 10.2, Viewshed Results and Discussion; Figure 4, Potential Visibility and Visual Resources for Solar Arrays; Figure 5, Potential Visibility and Visual Resources for the substation, POI switchyard, and transmission structures.
- LOS profiles were completed to address state aesthetic resources, fulfilling Section 900.2.9 (b)(1) (refer to Section 8(b)(1) of this Exhibit and Section 10.2.2 of the VIA). As opposed to viewshed analyses that provide visibility over a regional area, LOS profiles show elevation profiles from discrete Point A to Point B locations. LOS L1 from the Mohawk River (New York State Barge Canal Historic District) concludes that no resources will see the Facility along the profile path. LOS L2 shows three state resources that include NRHP-listed Covenhoven House, the NYS (S72) Snowmobile Trail, and the NRHP eligible Glen Village Cemetery may discern a small, confined number of solar arrays at a far distance above tree canopies, but not the entirety of the Facility. LOS L3 from the from the NRHP eligible Fonda Cemetery and all other resources along the profile line conclude that views of the Facility are not expected.

For more information regarding the LOS profiles, please see the following Sections of the VIA (Appendix 8-1): Section 7.2, Line of Sight Analysis; Section 10.2, Photo-Simulation and LOS Results and Discussion; Attachment 4, Photo-Simulations and Line of Sight Profiles.

- Facility simulations depicting Existing and Proposed Conditions with leaf-on and leaf-off vegetative landscaping were produced from sensitive and important representative locations and can be found in Attachment 3 of the VIA. The simulations also illustrate the proposed plantings within 0 to 2 years as well as 5 years post construction. Section 8(b)(4) of this Exhibit discusses public outreach and justification for the simulation viewpoint selection. Results and the quality of view varies from limited views to more full-on views throughout the VSA. More refined and nuanced discussion of each representative simulation is found in Section 8(c)(1) of this Exhibit and Section 10.2.1 of the VIA. Visual impact ratings (also known as “visual contrast ratings”) for existing versus proposed conditions were also applied to the eight Facility simulations (see Section 8(c)(4) of this Exhibit). Overall, the ratings resulted in two simulation viewpoints where Facility visual contrast was rated as Moderately Strong (VP45, VP68), two simulation viewpoints that were rated as Moderate (VP42, VP44), one simulation viewpoint that was rated as Weakly Moderate (VP80), two simulation viewpoints that were rated as Weak (VP61, VP94), and one simulation viewpoint that was rated as Very Weak (VP98). For more information regarding the photo-simulations, please see the following Sections of the VIA (Appendix 8-1): Section 7.3, Photographic Simulations; Section 10.2, Photo-Simulation and LOS Results and Discussion; Attachment 4, Photo-Simulations and Line of Sight Profiles. For more information regarding the visual impact rating of the photo-simulations, please see the following Sections of the VIA (Appendix 8-1): Section 9.0, Visual Impact Rating Methodology; Section 10.3, Visual Impact Rating Results; Attachment 5, Photo-Simulation Visual Impact Rating.
- The Applicant developed a Glare Analysis (Plan 6C in Attachment 6 of the VIA; see also Section 8(a)(9) of this Exhibit) to identify any potential glare impacts on nearby residences and roadways. The Glare Analysis concluded that there are no predicted glare occurrences for nearby residences or roadways as a result of the proposed single-axis tracking PV arrays, as well as no glare occurrences for the Fulton County Airport (NY0) approaches.

**(3) *The Visibility of Above-Ground Ancillary Structures, Interconnections and Roadways to be Constructed within the Facility***

Predicted visibility of the substation, POI switchyard, and associated transmission structures (herein refer to as the “POI components”) have been analyzed and are discussed in Section 10.1.2 of the VIA.

As discussed in Section 8(a)(2) above, a viewshed analysis was completed to predict visibility of the POI components. This viewshed analysis determined that 10.15% of potential visibility may occur within the VSA. The concentration of visibility is found within Distance Zone 1 (6.33%), whereas less is identified in Distance Zone 2 (3.82%). Overall, the tallest POI components consist of proposed transmission structures (135 to 195 feet in height), therefore, most visibility is anticipated to be a result of these structures. As shown in several photographs (VPs 6, 50, 69, 92, and 93; see Facility Photolog of Attachment 2 of the VIA) and photo-simulations (VPs 42, 44, 61, 80, and 94; see Attachment 3 of the VIA), views to the existing Marcy – New Scotland 345 kV transmission line are abundant within the VSA, but the overall appearance of the existing structures generally diminish when in Distance Zone 2. Therefore, it is expected that viewpoints from Distance Zone 2 to the proposed POI components will result in minimal visual change due to the presence, scale, and visual dominance of the existing Marcy – New Scotland 345 kV transmission line, and due to the limited amount that the POI components are actually discerned (3.82% in Distance Zone 2).

As stated above, the POI components visibility results within Distance Zone 1 (0.0 to 0.5-miles from observer to Facility) comprises a total of 6.33%. Due to the presence of existing forest vegetation bordering the north and west sides of the POI components, the nearest views are limited to a small section of Ingersoll Road in proximity to the existing Marcy – New Scotland 345 kV transmission line where VPs 69 and 70 were documented. These VPs face the general direction where the POI components may be seen from the road. As depicted in the VP 70 photograph, one residence is approximately 338 feet in distance to the proposed POI switchyard. Residences adjacent to these viewpoints may initially discern the Facility post-construction, however landscaping is proposed in the vicinity to the properties (as opposed to the vicinity of the POI components) for a more impactful screening effect, and visual contrast will diminish as plantings mature. If a residence discerns a limited portion of the POI components, the exact duration and frequency of view will vary depending on a resident’s location, objectives, and activities, but it is assumed the length of view will be longer as opposed to shorter (e.g., a traveler driving by the POI switchyard). Not all residents residing on Ingersoll Road will discern the

proposed POI components. VP 68 was developed as a photo-simulation from this general area and faces north toward the proposed solar arrays, substation, and transmission structures (see Attachment 3 of the VIA). As depicted in the VP 68 simulation, solar arrays in the foreground obstruct the visual sightline to the substation. In the distant forested background, a single transmission structure stands above the trees, but is partially intersected by the foreground solar panels. Approximately 5 years after Facility construction, landscaping reaches the heights of the panels where minimal components are noticed, however, the transmission structure remains distinguishable. Overall, the VP 68 simulation demonstrates that foreground solar arrays and the proposed landscaping vegetation will interfere and potentially impede some views to the POI components from Ingersoll Road.

Vantage points from all other roads within Distance Zone 1 are not expected to view the POI components at full scale because of intervening vegetation, topography, and viewing distance. A majority of the proposed substation components are less than 36 feet in height, or less than the height of existing mature forest. Therefore, many of the POI components will be partially or fully screened by forested vegetation located around Ingersoll Road and throughout Distance Zone 1. At most, it is anticipated that the top sections of the substation lightning masts, takeoff structures, and the proposed transmission structures (contain heights ranging from 70 to 195 feet) would be discerned above treetops from other visible roads within Distance Zone 1, however, the resulting visual contrast would be minor in context to the prominence of the existing Marcy – New Scotland 345 kV transmission line.

Simulations were prepared such that access roads to be constructed within the Facility, if present in the view, would appear. Of the eight simulations that have been prepared, either access roads do not appear within the camera extents at the viewpoint location or are not discernable in the view to due vegetative obstruction or distance.

#### ***(4) Appearance of the Facility Upon Completion***

Some visibility of the proposed solar arrays and supporting infrastructure is expected within the VSA. These data suggest that less than one percent of predicted visibility may occur in sensitive locations, such as developed areas (villages, residential, commercial, etc.), open areas (parks, cemeteries, greenspace, etc.) and rivers (Mohawk River and Schoharie Creek). Additionally, the Glare Analysis (Appendix 8-2) conducted evaluated the potential effects of solar array glint and glare. According to the results of the Glare Analysis, residences, and roadways in vicinity to the Facility will not be impacted. Overall, the results from visual analysis indicate that, although nearby

locations are anticipated to have moderately strong views of the Facility, the Facility will not detract from any significant unique or scenic visual landscape. Moreover, the VIA indicates that, at locations where the existing landscape has moderate scenic quality, the Facility's visual contrast is not expected to detract from existing views.

Photo-simulations were prepared to accurately illustrate the anticipated appearance of the Facility upon completion. These simulations generally show as expected, limited or fuller proximal and distant views of the Facility that predominantly appear much lower than surrounding tree heights that some but not all views might interrupt the horizon line. The photo-simulations are further discussed in Section 8(a)(6) below. Detailed discussion of the Facility appearance and the quality of views has been prepared at length in Section 8(d)(1) of this Exhibit.

#### ***(5) Lighting and Similar Features***

Please refer to Section 8(d)(9) of this Exhibit or Section 11.13 of the VIA (Appendix 8-1) for a discussion of Facility lighting as part of the Visual Impacts Minimization and Mitigation Plan (VIMMP). Plan 6B, Substation and POI Switchyard Plan & Profile Drawings and Lighting Plan, Attachment 6 of the VIA provides detailed engineering and specifications sheets for the Lighting Plan. The Lighting Plan in Attachment 6 of the VIA illustrates the proposed locations and positions of light fixtures, which are only intended for security, safety, and maintenance purposes. For the Facility, light fixtures are proposed within the substation and POI switchyard and developed to minimize light creep and runaway light while meeting lighting standards established by the National Electrical Safety Code (NESC). A minimal 0.25 candela occurs at the extents of the light sources.

#### ***(6) Representative Views (Photographic Overlays) of the Facility***

Photo-simulations were prepared to accurately illustrate the anticipated appearance of the Facility upon completion. Per Section 900.2.9 (b)(4)(i), photo-simulation locations are based on representative or typical views showing proposed site conditions from areas predicted to have direct line-of-sight visibility to the Facility. Eight viewpoint locations were prepared as simulations from important representative views at varying distances and cardinal directions around the Facility to the degree there is visibility. Each photo-simulation underwent a rigorous selection process to conform with the regulations (see Section 8(b)(4) of this Exhibit to review the VP selection process). Existing conditions photography utilized to produce the simulations was captured in April 2021, April 2022, and April 2023.

To depict the appearance of the Facility under varying conditions, Autodesk 3DS MAX 2022 visualization software was used to appropriately dimension a 3D model of the Facility onto a digital photograph depicting existing conditions from a select viewpoint location. Using engineering specifications and drawings obtained from the design engineers for the Facility, a representative 3D model of the solar layout was produced. The terrain elevation data (z value) needed to place the panels correctly on the surface of the Earth was derived from the LiDAR sources noted in Section 7.1.1 of the VIA (Appendix 8-1). Proposed grading elevations were then incorporated into the model. Using the engineering site plan and LiDAR terrain surface data in GIS, the x, y, z coordinates location of each proposed solar array was obtained and imported with the terrain surface into Autodesk 3DS MAX visualization software. A 3D model of individually proposed solar arrays was then constructed according to the solar panel specifications, tilt angle, and proposed racking system. The proposed arrays were modeled as bifacial single-portrait trackers with a height of 10 feet above finished grade with the array axis oriented in a north-south manner. The simulation model was further developed to position the viewer at the selected vantage point. For example, at any given vantage point the visualization software is capable of providing and adjusting a camera view that matches that of the actual photograph. From the field effort, the documented camera coordinate (x, y, z) positions were entered into the model along with other camera information. The model was further refined to precisely match the existing photograph by referencing LiDAR point cloud data against the landscape features identified within the photograph.

Subsequently, simulations with landscaping were produced from a computer-aided design (CAD) version of the proposed landscaping plan. The landscaping CAD files were produced in Autodesk Civil 3D 2020 and obtained directly from the Facility Landscape Architect, then imported into the Autodesk 3DS MAX modeling environment. Each proposed tree and shrub species was then translated and built into 3D. Projected growth rates and heights of each species were then assigned using conservative values (see Table 13 of the VIA, Appendix 8-1). This was completed to reasonably depict the scale, form, and heights of the proposed landscaping in a timeframe of 0 to 2 years and 5 years post-construction.

Autodesk 3DS MAX is capable of depicting physically accurate shadows and highlights on the model (Preetham et al. 1999). As such, during the field visits, each photograph recorded information such as geographic position, time, and date. These data typically exist as electronic information embedded in the respective digital photograph files. Subsequently, this information



can be used to calculate the sun angle in the simulation software in order to represent lighting conditions for the time of day and year that is illustrated in a given photograph.

In a similar manner, the above methodology was implemented to build the POI components with the specified dimensions outlined in Section 7.1.1 of the VIA (Appendix 8-1).

To demonstrate a range of post-construction scenarios, the following simulations are provided for each simulated VP:

- Representative Simulation with 0 to 2 Year Landscaping (Leaf Off)
- Representative Simulation with 0 to 2 Year Landscaping (Leaf On)
- Representative Simulation with 5 Year Landscaping (Leaf Off)
- Representative Simulation with 5 Year Landscaping (Leaf On)

The photo-simulations of the Facility are provided in Attachment 3 of the VIA (Appendix 8-1). Please refer to Section 7.3 (Photographic Simulations) and Section 10.2 (Photo-simulation and LOS Results and Discussion) of the VIA (Appendix 8-1) for detailed discussion of the photo-simulations.

***(7) The Nature and Degree of Visual Change from Construction of the Facility and Above-Ground Interconnects***

Potential visibility of construction activities is temporary in nature and involves the following major activities: building/upgrading/repairing access roads (as applicable), constructing laydown areas, removing necessary vegetation from areas of construction, delivering components, materials, and equipment, assembling solar arrays, constructing other Facility components (e.g., retention basins, substation, POI switchyard, overhead transmission lines, fences), and installing underground collection lines. During construction, there will be an increase in vehicular traffic, equipment, and workers seen within the Facility Site and the immediate surrounding area. Construction may result in the temporary increase of dust, however, dust control measures are proposed as referenced in the guidelines provisioned in the Civil Notes of General Environmental Restrictions; please review Appendix 5-1 of Exhibit 5 (Design Drawings) of the Application for more information.

Visual contrast during construction would vary in frequency and duration throughout the course of construction. There may be periods of intense activity followed by periods with less activity, and associated visibility would vary in accordance with construction activity levels. The construction phase of the Facility is temporary and is anticipated to last 12 to 18 months. Please refer to Exhibit 16, Effect on Transportation, for details regarding road usage and frequency associated with Facility construction. More information about the construction of the Facility is available in Section 12.0 of the VIA (Appendix 8-1) as well as Exhibit 16.

**(8) *The Nature and Degree of Visual Changes from Operation of the Facility and Above-Ground Interconnects***

The VIA provides an understanding of the visual relationship between the proposed Facility and its surrounding context. In-depth compilation of computerized analysis results and corresponding discussion is provided in Section 10.0 of VIA (Appendix 8-1). The following provides a summary of findings and impacts related to the Facility.

1. The proposed solar arrays will not be visible from the communities of the Village of Fultonville, Stone Ridge, Berryville, Tribes Hill, and the Hamlet of Auriesville. A minor and limited amount of visibility was predicted within the Village of Fonda but is isolated to a small, approximate 300-foot section on Cemetery Road, a small 70-foot gap within Fonda Cemetery (see LOS profile L3 of Attachment 3 of the VIA, Appendix 8-1), and intermittently through two separate agricultural fields, one south of NY5 and one west of Cemetery Road, where viewers are not expected to congregate. Due to the presence of existing vegetation, topography, and viewing distance to the Facility, limited views of solar arrays from the Village of Fonda will be infrequent, minimal, and will unlikely be perceived by the limited number of users accessing these areas. Less populated communities of Square Barn Corners (13 housing units; see Table 8-2 above) and the Hamlet of Glen (88 housing units; see Table 8-2 above) are expected to discern the solar arrays at variable distances, but not all residents in these communities will have a direct view from their respective properties. Landscape screening is proposed around the solar arrays where existing vegetation is absent and adjacent receptors are present. Within five years, the plantings are projected and anticipated to attain growth height comparable to the solar arrays, thereby greatly reducing visibility of the Facility. Viewshed results of the proposed solar arrays and associated infrastructure conclude that 17.4% of the VSA was predicted as visible, therefore, 82.6% of the solar arrays will be screened by existing vegetation,

topography, and existing development. Within the VSA, 6.6% of the 17.4% of solar array visibility is located on participating landowner properties, therefore, 10.8% of predicted solar panel visibility occurs on non-participating landowner properties. Proposed landscaping within a 5-year timeframe is anticipated to moderately discount the overall percentage of predicted visibility as plantings mature to equivalent heights of the solar arrays, consequentially, in time the Facility will become less discernible than what was predicted in the solar array viewshed analysis (see Figure 4 of the VIA, Appendix 8-1).

2. The VSA was partitioned into two distance zones to objectively determine the Facility's visual effect from discrete distances. Distance Zone 1 (0.0 to 0.5 miles from observer to Facility) contains 11.5% of potential solar array visibility, whereas Distance Zone 2 (0.5 to 2 miles) comprises 5.9%. However, a moderate amount of solar array visibility occurs within the Facility Site and participating landowner properties. If deducting these areas from the percentage of solar array visibility, Distance Zone 1 is reduced to 5% and Distance Zone 2 remains at 5.9%.
3. LSZ Zone 1 Agricultural is prevalent within the VSA (approximately 54% of VSA) where 15.9% of a total of 17.4% of solar panel visibility is predicted to occur, whereas LSZ Zone 2 Forested comprises approximately 32% of land in the VSA where only 0.6% visibility is predicted. The remaining LSZs Zone 3 Developed (10.4% of land in VSA), Zone 4 Open (1.6% of land in VSA), and Zone 5 River Corridor (2.3% of land in VSA) are smaller contributors to the landscape where 0.92% of visibility was predicted. This data suggests that a very small percentage of predicted visibility (0.92%) occurs in sensitive locations such as developed areas (villages, residential, commercial, etc.), open areas (parks, cemeteries, greenspace, etc.), and rivers (Mohawk River and Schoharie Creek).
4. The POI components viewshed determined that 10.15% of potential visibility may occur within the VSA. As shown in Table 10 of the VIA (Appendix 8-1), the concentration of visibility is found within Distance Zone 1 (6.33%), whereas less visibility is identified in Distance Zone 2 (3.82%). Overall, the tallest POI components consist of proposed transmission structures (135 to 195 feet in height), therefore, most visibility is anticipated to be a result of these structures. As shown in several photographs (VPs 6, 50, 69, 92, and 93; see the Facility Photolog (Attachment 2 of the VIA, Appendix 8-1) and photo-simulations (VPs 42, 44, 61, 80, and 94; see Attachment

3 of the VIA, Appendix 8-1), views to the existing Marcy – New Scotland 345 kV transmission line are abundant within the VSA, but the overall appearance of the existing structures generally diminish when in Distance Zone 2. Therefore, it is expected that viewpoints from Distance Zone 2 to the proposed POI components will result in minimal visual change due to the presence, scale, and visual dominance of the existing Marcy – New Scotland 345 kV transmission line, and due to the limited amount that the POI components are discerned (3.82% in Distance Zone 2).

5. POI components visibility within Distance Zone 1 (0.0 to 0.5-miles from observer to Facility) comprises a total of 6.33%. Due to the presence of existing forest vegetation bordering the north and west sides of the POI components, the nearest views are limited to a small section of Ingersoll Road in proximity to the existing Marcy – New Scotland 345 kV transmission line where VPs 69 and 70 were documented. These VPs face the general direction where the POI components may be seen from the road. A limited number of residences are adjacent to these viewpoints. The proposed landscaping is sited closer to these residences to provide more impactful and measurable screening effects to the Facility. Other vantage points on Ingersoll Road (see VP 68 simulation in Attachment 3 of the VIA, Appendix 8-1) demonstrate that foreground solar arrays and the proposed landscaping vegetation will interfere and potentially impede some views to the POI components. Vantage points from all other roads within Distance Zone 1 are not expected to view the POI components at full scale because of intervening vegetation, topography, and viewing distance. For example, a majority of the proposed substation components are less than 36 feet in height, which is less than the height of the adjacent existing mature forest. Therefore, many of the POI components will be partially or fully screened by forested vegetation located around Ingersoll Road and throughout Distance Zone 1. At most, it is anticipated that the top sections of substation lightning masts, takeoff structures, and the proposed transmission structures (containing heights of 70 to 195 feet) would be discerned above treetops from other roads within Distance Zone 1, however, the resulting visual contrast would be minor in context to the prominence of the existing Marcy – New Scotland 345 kV transmission line.
6. 35 out of 132 visual resources (see Table 4 and 5 in Appendix 8-1) received a prediction of visibility consisting of Facility solar arrays and associated infrastructure. The distinction of Facility visibility at a select resource should not be confused with a

declaration of visual impact, nor does it immediately constitute profound and adverse visual impact.

- Local resources anticipated to experience most visual effects of the Facility are confined to sections of Montgomery County Scenic Byways that travel adjacent to the Facility (Van Epps Road, Ingersoll Road, Auriesville Road, and Fisher Road, also classed by the DOT as local roads), however, official state-listed scenic byways and bicycle routes (NYS Bicycle Route 5S, Adirondack Trail, and Revolutionary Trail Scenic Byway) contain minimal to no solar array visibility. Visual change that occurs within the limited sections of the Montgomery County Scenic Byway resources is expected to be temporary until suitable time is provided for the proposed landscaping to mature and become effective screening mitigation. As illustrated in photo-simulations (VPs 44 and 68) with landscaping at 5 years (leaf-on) post-construction, the appearance of the Facility is mostly screened by vegetation, although, some vantage points (VPs 42 and 45; Van Epps Road and Ingersoll Road) may still discern a portion of the Facility after a period of 5 years. However, Van Epps Road and Ingersoll Road are classified as local roads. As noted in Table 2 in Appendix 8-1, local roads within the VSA support less travelers (AADT of 99 to 527) than highly traversed roadways such as NY5S, which is classed as a Major Collector with an AADT of 3,759 and is predicted to receive a negligible amount of visibility. Consequentially, the number of traffickers (viewers) on Montgomery County Scenic Byways will be limited.
- Not all visual resources within the VSA with predicted solar array visibility will experience an elevated amount of visual change. All photo-simulations have been prepared from notable local, state, and/or federal resources to illustrate the appearance of the Facility. Photo-simulations that depict a lesser amount of visual change at visual resources are noted as VPs 61, 80, 94 and 98. Other simulations prepared from visual resources in proximity to the Facility (VPs 42, 44, and 68) illustrate that in 5 years post-construction, landscaping will provide beneficial screening to the Facility during warmer seasons when user activity is expected to be the highest.
- As mentioned in Section 6.0, on July 14, 2023, OPRHP determined there will be “no above ground concerns, as the solar array visibility from the Glen Historic District will be limited”. The VP 80 photo-simulation illustrates a partial and distant

view to the Facility from within the Glen Historic District and the visual contrast rating results of the proposed condition with 0 to 2 year landscaping indicate a weakly moderate visual change.

- LOS profiles L1, L2, and L3 were prepared from important state and/or federal resources (NRHP-listed Covenhoven House, New York State Barge Canal Historic District, and NRHP eligible Fonda Cemetery) from within Distance Zone 2 at varying distances to the Facility (ranging from 1.58 to 3.98 miles from observer to Facility). The LOS profiles illustrate that most solar panels along each LOS pathway are obstructed by existing topography and vegetation, and that a very limited part of solar panels would be discernible from distances over 1.58 miles. As shown in the VP 61 photo-simulation (viewing distance of 2.15 miles to the Facility), the Facility is difficult to identify within the landscape and it is expected that the Facility may go unrecognized by most observers.
7. Cumulative effects of the Facility and existing Marcy – New Scotland 345 kV transmission line are expected to occur in limited areas within the VSA. As depicted in the photo-simulations within Distance Zone 2 (VPs 61 and 94), cumulative effects are partially discernible by the appearance of proposed solar arrays and existing H-frame structures but are relatively small in contrast to the larger visible landscape. Cumulative visual contrast will likely increase when in immediate vicinity of the Facility and Marcy – New Scotland 345 kV transmission line, however because of the existing visual contrast associated with the Marcy – New Scotland 345 kV transmission line, the addition of the Facility is not anticipated to change the current utility infrastructure characteristics from the limited and proximal views of both existing and proposed actions. Moreover, proposed landscaping is sited around the Facility. In 5 years, the plantings will reach approximate heights of the solar arrays and will likely diminish the cumulative effects.
8. Cumulative effects of the proposed Facility and the existing Van Epps & Mohawk View Community Solar facilities are considered visually negligible. As shown in the VP 98 photo-simulation from Van Epps Road (see Attachment 3 of the VIA, Appendix 8-1), the Facility is difficult to perceive behind dense forest vegetation. Furthermore, according to a graphic available on the Van Epps & Mohawk View Community Solar website (Van Epps & Mohawk View - Eden Renewables 2021), if installed, the

proposed landscaping of these projects (consisting of native trees and shrubs) would likely supplement a diminishment of both the existing Eden Renewables solar projects.

9. A professional rating panel was instructed to evaluate visual contrast of the existing condition photograph against the eight viewpoint simulations of the proposed Facility with landscaping within 0 to 2 years post-construction (see Appendix 8-1, Section 9.0 for the visual impact rating methodology and Appendix 8-1, Section 10.3 for the visual impact rating results). The visual impact rating results do not account for plant maturation (landscaping at 5 years post-construction) which is expected to further reduce the visibility and contrast of the Facility. The existing photographs depict existing vegetation during leaf-off conditions (no foliage); therefore, the rating results do not consider the visual screening effects of existing vegetation during leaf-on conditions that may diminish or preclude views to the Facility. Therefore, the above conditions must be considered when reviewing and interpreting the visual impact rating results. In summary of the visual impact rating results, VP 44 at Ingersoll Road (Montgomery County Scenic Byway), VP 45 at Van Epps Road & Ingersoll Road (Montgomery County Scenic Byway, and VP 68 at Ingersoll Road (Montgomery County Scenic Byway) received the highest contrast ratings ranging from moderate to moderately strong, however, they also received a weak scenic quality rating of the existing condition. The average contrast rating and scenic quality rating for VP 42 at Auriesville Road (Montgomery County Scenic Byway) resulted in a moderate score. The remaining four VPs including VP 61 at NY5, Rest Stop Overlook (Revolutionary Trail Scenic Byway and Mohawk Area #3 Marker), VP 80 at Mill Point Road (Glen Reformed Church and Glen Historic District), VP 94 at Saint Kateri National Shrine and Historic Site, and VP 98 at Van Epps Road (Montgomery County Scenic Byway) received weaker visual contrast ratings ranging from very weak to weakly moderate. As mentioned, the average visual contrast rating did not consider the attainable heights of the proposed landscaping within 5 years after construction of the Facility, nor were leaf-on conditions considered which could further reduce Facility visibility. For this reason, it is likely that the visual contrast ratings would decrease when evaluating the simulations with 5-year landscaping post-construction with leaf-on conditions of the existing environment.
10. The Facility does not have an adverse effect on a known listed scenic vista.
11. The Facility does not damage or degrade existing scenic resources.

12. The Facility does not create a new source of substantial light that would adversely affect nighttime views in the area.
13. The Glare Analysis (Appendix 8-1, Attachment 6, Plan 6C) evaluated the Fulton County Airport, 16 adjacent roadways, and 312 residential dwellings within the vicinity to the Facility. The Glare Analysis concluded that there are no predicted glare occurrences for nearby residences or roadways as a result of the proposed single-axis tracking PV arrays, as well as no glare occurrences for the Fulton County Airport (NY0) approaches.

Refer to Section 14.0, Summary Conclusions – Visual Impacts During Operation, of the VIA (Appendix 8-1) for a summary of visual change during operation of the Facility.

***(9) The Related Operation Effects of the Facility***

No adverse related operational effects of the Facility are anticipated. A Glare Analysis was obtained by the Applicant to identify any potential glint/glare impacts on nearby residences and roadways. The Glare Analysis was prepared using ForgeSolar's GlareGauge software; this technology is based on the Solar Glare Hazard Analysis Tool (SGHAT) developed by the Federal Aviation Administration (FAA) in cooperation with the Department of Energy (DOE) enhanced for glint and glare assessments outside of the aviation industry. As mentioned above in Section 8(a)(9), the Glare Analysis found that no residential dwelling, nor roadways are predicted to receive glint or glare. The Fulton County Airport approaches also will not receive any glare. Consequentially, there are no glare impacts occur as a result of the Facility. Please review Plan 6C in Attachment 6 of the VIA (Appendix 8-1) to obtain more detailed information pertaining to the Glare Analysis results and methodology. Additionally refer to Section 11.10, Glare for Solar Facilities, of the VIA (Appendix 8-1).

***(10) Visual Resources Affected by the Facility***

A comprehensive inventory of aesthetic resources was established according to readily and publicly available data. These data are comprised of local, county, state, and federally recognized visual resource and/or sensitive sites within the full extents of the VSA and were compiled according to Section 900-2.9 (b)(4)(ii). Please refer to Section 6.0, Scenic Resources Inventory, of the VIA for a complete discussion of visual resources inventoried in proximity to the Facility.



Two discrete opportunities were provided to visual stakeholders, including local municipalities, Montgomery County, and state agencies, to append additional visual resources of concern to the inventory (a description of the visual stakeholder information requests are outlined in Section 6.0 of the VIA; Stakeholder correspondence is documented in Attachment 4 of the VIA). The engagement resulted in a request to identify, inventory, and evaluate potential visibility from all local historical markers, memorials, and monuments within the 2-mile VSA; this inventory is summarized in Table 8-3 below. Aesthetic resources identified within the VSA are tabulated in Table 8-4 below. Local municipality and Montgomery County requests to append resources to the table are denoted by “L” (for local municipality) and “C” (for Montgomery County), respectively.

Table 8-4 below contains the results of the investigatory findings for listed and recognized scenic resources within each village, town, or agency in accordance with 94-c aesthetic resource criteria provided in Section 900-2.9 (b)(4)(ii). Figures 3, 4, and 5 of the VIA (Appendix 8-1) depict the geographic location of each inventoried resource. The Project Photolog (Attachment 2 of the VIA, Appendix 8-1) illustrates photographs taken from viewpoint locations throughout the VSA. Many of these photographs were documented from inventoried scenic and aesthetic resources identified below; these photographs depict the existing condition of the view and face the general direction of the Facility Site.

**Table 8-3. Local Historical Markers, Memorials, and Monuments within the 2-Mile VSA**

Map ID	Resource Name	Town/Village	Approximate Distance to Solar Arrays (Mile)	LSZ <sup>2</sup>	Federal (F), State (S), County I, or Local (L) Resource	Potential Visibility <sup>1</sup>
<b>Local Historical Markers, Memorials, and Monuments</b>						
HM1	Ossernenon Marker	Glen	1.02	1,2,3	L, C	No
HM2	Homestead of Capt. Albert C. Olmsted Marker	Glen	0.92	1,2,3	L, C	Yes
HM3	Cromwell Home Marker	Glen	1.13	2,3	L, C	No
HM4	First School Marker	Glen	0.79	2,3	L, C	No
HM5	Van D'rn's Mill Marker	Glen	1.02	2	L, C	No
HM6	Van Epps Home Marker	Glen, Fultonville	0.75	2,3	L, C	No
HM7	Volkert Veeder Home Marker	Mohawk	0.53	1,2,3	L, C	No
HM8	Johnson Hall – 1763	Glen	0.23	2,3,4	L	No
HM9	Site of The Battle of Oriskany	Glen	0.32	2,3,4,5	L	No
HM10	Herkimer Home – 1764	Glen	0.30	2,3,4,5	L	No
HM11	Mohawk Area #1 Marker (NY I-90)	Glen	0.29	2,3,4,5	L	No
HM12	Mohawk Area #2 Marker (NY I-90)	Glen	0.24	2,3	L	No
HM13	Mohawk Area #3 Marker (Rest Stop Overlook)	Mohawk	0.94	1,3,4	L	Yes
HM14	Douw Fonda Marker	Mohawk, Fonda	1.02	3,4	L, C	No
HM15	Fonda Tavern Marker	Mohawk	1.52	2,3	L, C	No
HM16	Danascara Place Marker	Mohawk	0.89	2,3	L, C	No
HM17	Fultonville Union Free High School Marker	Glen, Fultonville	1.26	3,4	L, C	No
HM18	Jail Limit Marker	Mohawk	1.77	2,3,4	L, C	Yes
HM19	Caughnawaga Church Marker	Mohawk, Fonda	1.33	3	L, C	No
HM20	Reformed Dutch Church of Caughnawaga Marker	Mohawk, Fonda	1.34	3	L	No

Map ID	Resource Name	Town/Village	Approximate Distance to Solar Arrays (Mile)	LSZ <sup>2</sup>	Federal (F), State (S), County I, or Local (L) Resource	Potential Visibility <sup>1</sup>
HM21	Thomas Romeyn Marker	Mohawk, Fonda	1.34	3	L	No
HM22	Fonda Cemetery Marker	Mohawk, Fonda	1.32	3,4	L, C	No
HM23	Court House Marker	Mohawk, Fonda	0.97	3,4	L, C	No
HM24	The <sup>11</sup> 5th & <sup>15</sup> 3rd Regiments Marker	Mohawk, Fonda	0.95	3,4	L	No
HM25	Major General Richard Montgomery Marker	Mohawk, Fonda	0.93	3,4	L	No
HM26	Isaac Jogues Marker	Glen	1.04	1,2,3	L	No
HM27	Kateri Tekakwitha Marker	Glen	1.06	1,2,3	L	No
HM28	Veeder Home Marker	Mohawk	0.52	3,4	L	No
HM29	A Liberty Pole Marker	Mohawk	0.64	3,4	L, C	No
HM30	Liberty Pole (Stone Marker)	Mohawk	0.65	3,4	L	No
HM31	Caughnawaga Marker	Mohawk	0.91	2,3,4	L, C	No
HM32	Caughnawaga and St. Peter Chapel Marker	Mohawk	0.94	2,3,4	L	No
HM33	Montgomery County Korean War Veterans Monument	Mohawk, Fonda	1.15	3,4	L	No
HM34	Wemple Tavern Marker	Mohawk, Fonda	1.01	2,3	L	No
HM35	Peggy Wemple Tavern and Mill Marker	Mohawk, Fonda	0.97	2,3	L, C	No
HM36	Camp Mohawk Marker	Mohawk	1.37	3,4	L, C	No
HM37	County Poorhouse Marker	Glen	1.08	2,3	L, C	No
HM38	Patriot Burials Marker	Glen	0.30	2,3,4	L, C	No
HM39	Pappy Douw Fonda House Marker (Sign Missing)	Fonda	1.01	2,3	C	No
HM40	Rev Frothingham	Fonda, Mohawk	1.01	3	L, C	No
HM41	Block House	Glen, Fultonville	0.73	3	C	No

Map ID	Resource Name	Town/Village	Approximate Distance to Solar Arrays (Mile)	LSZ <sup>2</sup>	Federal (F), State (S), County I, or Local (L) Resource	Potential Visibility <sup>1</sup>
HM42	Old Courthouse Complex	Fonda, Mohawk	0.94	3	C	No
HM43	Court House	Fonda, Mohawk	1.15	3	C	No
HM44	Davis Tavern (Marker Currently Missing)	Fonda, Mohawk	1.31	3	C	No

<sup>1</sup>Potential visibility is obtained from the viewshed analysis using topography, trees, and buildings only, per Section 900.2.9(b)(1).

<sup>2</sup>Please refer to Section 5.0, Landscape Similarity Zones, of the VIA (Appendix 8-1) for definitions of each LSZ.

**Table 8-4. Inventory of Aesthetic Resources within the 2-Mile VSA**

Map ID	Resource Name	Town/Village	Approximate Distance to Solar Arrays (Mile)	LSZ <sup>4</sup>	Federal (F), State (S), County (C), or Local (L) Resource	Potential Visibility <sup>1</sup>
<b>Recreation</b>						
A1	Village of Fonda Recreational Park	Fonda	1.01	3,4	L	No
B2	Mohawk River Canoe Launch	Fultonville	1.29	3,5	L	No
C3	George P. Synder SR. Community Park	Fultonville	0.91	3,4	L	No
D4	Western Supreme Buddha Temple	Glen	1.35	3,4	L, C	Yes (Minimal)
E5	Bellinger's Orchard	Glen	0.66	1,3	L	Yes
F6	Fonda Little League Park	Mohawk	1.48	3,4	L	Yes (Minimal)
G7	Tribes Hill Community Park	Mohawk	1.63	3,4	L	No
H8	NYS Snowmobile Trails (S72, S71, C7P, C7D, C7B)	Multiple Municipalities	N/A	1,2	S	Yes (C7D, C7B, S71, S72)
I9	Erie Canalway Trail	Multiple Municipalities	0.19 (closest point)	2,3,4	S	No
J10	NYS Bicycle Route 5 (NY5S)	Root, Glen	0.18 (closest point)	1,2,3	S	Yes (Minimal)
<b>NYS Scenic Byways</b>						
K11	Adirondack Trail/NYS Route 30A	Mohawk, Fonda	0.98	1,2,3	S, C	No
L12	Revolutionary Trail/NYS Route 5	Mohawk, Fonda	0.5 (closest point)	1,2,3	S	Yes

Map ID	Resource Name	Town/Village	Approximate Distance to Solar Arrays (Mile)	LSZ <sup>4</sup>	Federal (F), State (S), County (C), or Local (L) Resource	Potential Visibility <sup>1</sup>
<b>Montgomery County Scenic Byways</b>						
MC1	Auriesville Road (CR 122)	Glen	0.01 (closest point)	1,2,3	C	Yes
MC2	Borden Road (CR 115)	Glen	0.60 (closest point)	1,2,3	C	No
MC3	Fisher Road (CR 118)	Glen	0.01 (closest point)	1,2,3	C	Yes
MC4	Hickory Hill Road (CR 33)	Mohawk	0.74 (closest point)	1,2,3	C	Yes
MC5	Hyney Hill Road (CR 123)	Glen	1.43 (closest point)	1,2,3	C	Yes (Minimal)
MC6	Ingersoll Road (CR 117)	Glen	0.01 (closest point)	1,2,3	C	Yes
MC7	Logtown Road (CR 110)	Glen	0.27 (closest point)	1,2,3	C	Yes
MC8	Noeltner Road (CR 164)	Glen	0.43 (closest point)	1,2,3	C	Yes
MC9	Noeltner Spur (CR 166)	Glen	0.69 (closest point)	1	C	Yes
MC10	Old Trail Road (CR 30)	Mohawk	1.5 (closest point)	1,2,3	C	No
MC11	Stone Arabia Road (CR 34)	Mohawk	1.48 (closest point)	1,2,3	C	Yes (Minimal)
MC12	Van Epps Road (CR 116)	Glen, Fultonville	0.02 (closest point)	1,2,3	C	Yes

Map ID	Resource Name	Town/Village	Approximate Distance to Solar Arrays (Mile)	LSZ <sup>4</sup>	Federal (F), State (S), County (C), or Local (L) Resource	Potential Visibility <sup>1</sup>
<b>NYS/National Heritage Corridor</b>						
Encompasses VSA	Erie Canalway National Heritage Corridor	Multiple Municipalities	N/A	1,2,3,5	F, C	Yes
Encompasses VSA	Mohawk Valley State Heritage Corridor	Multiple Municipalities	N/A	1,2,3,5	S	Yes
<b>National Rivers Inventory</b>						
M13	Schoharie Creek <sup>3</sup>	Glen, Florida,	1.54	5	F, C	No
<b>Conservation Easements</b>						
N14A-N14D	NRCS - Wetlands Reserve Program (4 parcels)	Glen N14A Glen N14B Glen N14C Mohawk N14D	0.48 (closest point)	2,4	F	No
O15	NGO - Schoharie Land Trust (Dillenbeck Easement)	Glen	1.26	2,4	L	No
<b>Other</b>						
P16	Jesuit Cemetery	Glen	1.23	4	C	No
Q17	Printup Burial Ground	Glen	0.37	2	C	No
R18	Hall Family Cemetery (Former site of Wells Family Cemetery)	Glen	1.28	1	C	No
S19	Winnie School (Ilene Wagner's House)	Glen	0.25	1,2,3	L, C	Yes
T20	Saint Kateri National Shrine and Historic Site	Mohawk	0.70	2,3,4	L	Yes
U21	Rest Stop Overlook (Mohawk Area #3 Marker)	Mohawk	1.27	1,3,4	L	Yes

Map ID	Resource Name	Town/Village	Approximate Distance to Solar Arrays (Mile)	LSZ <sup>4</sup>	Federal (F), State (S), County (C), or Local (L) Resource	Potential Visibility <sup>1</sup>
V22	Danascara Cemetery	Mohawk	0.95	2,3	C	No
<b>Potential Environmental Justice Area</b>						
See Figure 4	Census Tract 727, Block Group 2	Glen	N/A	1,2,3,5	S	Yes

<sup>1</sup>Potential visibility is obtained from the viewshed analysis using topography, trees, and buildings only, per Section 900.2.9(b)(1), simulations or by methods of onsite field verification.

<sup>2</sup>Also recognized as a National Historic Landmark per the National Park Service.

<sup>3</sup>Resource is also considered to be recreational.

<sup>4</sup>Please refer to Section 5.0, Landscape Similarity Zones, of the VIA (Appendix 8-1) for definitions of each LSZ.



Table 8-4, continued

Map ID	USN	Resource Name	Distance (Miles)	Address	Town/Village	Federal (F), State (S), County (C), or Local (L) Resource	Potential Visibility <sup>1</sup>
<b>NRHP-listed Historic District</b>							
1	19NR00026	<b>Fultonville Historic District</b> (345 Resources)	0.35	N/A	Fultonville	F, C	No
2	14NR06559 00104.000641 05744.000229 05744.000230 05744.000231 05744.000232 05744.000233 05744.000234 05744.000235 05744.000236 05744.000237 05744.000238 05274.000239 05274.000240	<b>New York State Barge Canal Historic District: Fonda Terminal and Canal Shops<sup>2</sup></b> (13 Resources)	0.78	N/A	Fonda	F	No
3	14NR06559	<b>New York State Barge Canal Historic District: Mohawk River<sup>2,3</sup></b>	0.19 (closest point)	N/A	Multiple Municipalities	F	Yes
4	<b>01NR01763</b> 05705.000009 05705.000012 05705.000072 05705.000078 05705.000079 05705.000081 05705.000082 05705.000083	<b>Glen Historic District</b> (32 Resources)	0.22	N/A	Glen	F, C	Yes  <b>01NR01763</b>  05705.000012 05705.000092

Map ID	USN	Resource Name	Distance (Miles)	Address	Town/Village	Federal (F), State (S), County (C), or Local (L) Resource	Potential Visibility <sup>1</sup>
	05705.000084						05705.000094
	05705.000087						05705.000095
	05705.000088						05705.000099
	05705.000089						05705.000100
	05705.000090						05705.000101
	05705.000091						05705.000102
	05705.000092						05705.000103
	05705.000093						05705.000104
	05705.000094						05705.000105
	05705.000095						05705.000106
	05705.000096						05705.000130
	05705.000097						05705.000131
	05705.000098						05705.000134
	05705.000099						
	05705.000100						
	05705.000101						
	05705.000102						
	05705.000103						
	05705.000104						
	05705.000105						
	05705.000106						
	05705.000130						
	05705.000131						
	05705.000134						
<b>NRHP Listed Historic Site</b>							
5	90NR01535	Schoharie Crossing State Historic Site <sup>3</sup>	1.99	Main Street	Florida	F	No
6	90NR01535	Schoharie Crossing State Historic Site (Recreational Park) <sup>3</sup>	1.96	Hartley Lane	Glen	F	Yes

Map ID	USN	Resource Name	Distance (Miles)	Address	Town/Village	Federal (F), State (S), County (C), or Local (L) Resource	Potential Visibility <sup>1</sup>
7	19NR00080 05707.000006	Danascara Place	0.93	662 Mohawk Drive	Mohawk	F	No
8	90NR01549	Old Montgomery Co. Courthouse	0.95	9 Park Street	Fonda	F, C	No
9	90NR01550	New Montgomery Co. Courthouse	1.16	58 Broadway	Fonda	F	No
10	05705.000071	Covenhoven House	0.92	141 Reynolds Road	Glen	F, C	Yes
11	NR73001207	Caughnawaga Indian Village and Castle Site	0.96	Hickory Hill Road	Mohawk	F, C	No
<b>NRHP Eligible Historic Site</b>							
12	05705.000002	National Shrine of the North American Martyrs	1.15	Shrine Road	Glen	F, C	No
13	05705.000008	Auriesville Cemetery (Quackenbush Cemetery)	0.58	Valley View Drive	Glen	F, C	No
14	05705.000085	Knickerbocker Farm	1.94	208 Round Barn Road	Glen	F	No
15	05705.000110	Farm	0.57	129 Valley View Drive	Glen	F	No
16	05705.000123	Our Lady of Martyrs Shrine Gift Shop	0.92	Noeltner Road	Glen	F	No
17	05705.000046	Baird-Bennett House	0.23	871 Argersinger Road	Glen	F	Yes
18	05707.000054	Volkert Veeder-Ostrander House (Building D)	0.56	3810 Fonda Road West (NY-5)	Mohawk	F	Yes (Minimal)

Map ID	USN	Resource Name	Distance (Miles)	Address	Town/Village	Federal (F), State (S), County (C), or Local (L) Resource	Potential Visibility <sup>1</sup>
19	05707.000055	Abraham Veeder House (Building E)	0.54	3666 Fonda Road West (NY-5)	Mohawk	F	Yes
20	05707.000056	Klock House	1.65	Fonda Road East (NY-5)	Mohawk	F	No
21	05707.000084	F, J & G Railroad bridge; 1868/1890 Warren-deck-truss	1.22	Route 334	Mohawk	F	No
22	05744.000012	Montgomery County Fairgrounds <sup>3</sup>	1.08	Bridge Street	Fonda	F	No
23	05744.000025	Fonda House	0.95	56 West Main Street	Fonda	F, C	No
24	05744.000026	A. Doxtader House (Starin ind. school/garage)	0.96	46 West Main Street	Fonda	F, C	No
25	05744.000118	House	1.12	53 Broadway	Fonda	F	No
26	05744.000145	Lower Mill	0.90	1 Cayadutta Street	Fonda	F	No
27	05744.000153	Mills Terrace	1.02	2-8 West Prospect Street	Fonda	F	No
28	05744.000196	House	1.04	4 West Main Street	Fonda	F	No
29	05744.000221	Montgomery County Public Annex (former Fonda High School)	0.97	20 Park Street	Fonda	F, C	No

Map ID	USN	Resource Name	Distance (Miles)	Address	Town/Village	Federal (F), State (S), County (C), or Local (L) Resource	Potential Visibility <sup>1</sup>
30	05744.000242	Fonda Speedway <sup>3</sup>	1.11	Bridge Street	Fonda	F, C	No
31	N/A	Fultonville Cemetery & Natural Burial Ground	0.48	Upper Mohawk Street	Fultonville	F, C, L	No
32	N/A	Van Epps – Starin Cemetery (Hoff & Shelp Cemetery)	0.56	Main Street	Fultonville	F, C	No
<b>October 2021 Historic Architectural Survey Additional Recommended NRHP Eligible Sites<sup>4</sup></b>							
See Figure 4 Sheet 4A	05744.000023 05744.000024 05744.000028 05744.000029 05744.000030 05744.000031 05744.000081 05744.000083 05744.000085 05744.000086 05744.000087 05744.000130 05744.000133 05744.000134 05744.000135 05744.000136 05744.000137 05744.000138 05744.000139 05744.000140	<b>Fonda Main Street Historic District</b> (23 Eligible Resources)	1.03	Main Street	Fonda	F, C	No

Map ID	USN	Resource Name	Distance (Miles)	Address	Town/Village	Federal (F), State (S), County (C), or Local (L) Resource	Potential Visibility <sup>1</sup>
	05744.000141 05744.000141 05744.000143 05744.000196						
33	05744.000098	House	1.13	44 Broadway	Fonda	F	No
34	N/A	Fonda Cemetery (Old Caughnawaga Cemetery)	1.37	8 Cemetery Street	Fonda	F, C	Yes (Minimal)
35	N/A	House	0.99	621 Argersinger Road	Glen	F	No
36	N/A	Glen Village Cemetery	0.28	7 Logtown Road	Glen	F, C	Yes (Minimal)
37	N/A	Wyckoff Cemetery	0.48	NY-30A	Glen	F	Yes
38	05705.000141	Maple Avenue Cemetery	1.20	Maple Ave.	Glen	F, C	Yes (Minimal)
39	05707.000077	Tekakwitha Friary (H.D.F. Veeder House)	0.63	3642 Fonda Road West (NY-5)	Mohawk	F	No
40	N/A	Evergreen Cemetery	1.51	296 Martin Road	Mohawk	F, C	No
41	N/A	St. Cecilia Cemetery	1.41	Siebe Ln.	Mohawk	F, C	Yes
42	05744.000005	House	1.13	40 Broadway	Fonda	F	No
43	05744.000096	House	1.11	38 Broadway	Fonda	F	No
44	05744.000105	Reformed Church of Fonda and Parsonage	1.05	19-21 Broadway	Fonda	F	No

Map ID	USN	Resource Name	Distance (Miles)	Address	Town/Village	Federal (F), State (S), County (C), or Local (L) Resource	Potential Visibility <sup>1</sup>
45	05744.000113	House	1.10	43 Broadway	Fonda	F	No
46	05744.000125	House	1.18	6 Court Street	Fonda	F	No
47	05744.000147	Mill House	0.93	8 Cayadutta Street	Fonda	F	No

<sup>1</sup> Potential visibility is obtained from the viewshed analysis using topography, trees, and buildings only, per Section 900.2.9(b)(1), simulations or by methods of onsite field verification.

<sup>2</sup> Also recognized as a National Historic Landmark by the National Park Service.

<sup>3</sup> Resource is also considered to be recreational.

<sup>4</sup> Based on the historic architectural survey conducted within the Area of Potential Effects which was determined to be 2 miles. Survey was conducted in July 2021. Refer to Exhibit 9 for full details.

## **Visibility of Solar Arrays at Identified Resources with Predicted Visibility**

Resources with predicted visibility of solar arrays are described in Sections 10.1.1.2, 10.1.1.3, and 10.1.1.4 of the VIA (Appendix 8-1). In summary, the following resources may have the potential to view the proposed Facility:

### Federal Resources

- New York State Barge Canal Historic District: Mohawk River
- Erie Canalway National Heritage Corridor
- Glen Historic District
- Schoharie Crossing State Historic Site (Recreational Park)
- Covenhoven House, 141 Reynolds Road, Glen
- Baird-Bennett House, 871 Argersinger Road, Glen
- Volkert Veeder-Ostrander House (Building D), 3810 Fonda Road West, Mohawk
- Abraham Veeder House (Building E), 3666, Fonda Road West, Mohawk
- Fonda Cemetery (Old Caughnawaga Cemetery), 8 Cemetery Street, Fonda
- Glen Village Cemetery, 7 Logtown Road, Glen
- Wyckoff Cemetery, NY30A, Glen
- St. Cecilia Cemetery, Siebe Lane, Mohawk

### State Resources

- NYS Snowmobile Trails (S71, S72, C7D, C7B)
- NYS Bicycle Route 5 (NY5S)
- Revolutionary Trail/NY5
- Mohawk Valley State Heritage Corridor
- PEJA - Census Tract 727, Block Group 2

### Local Resources

- Homestead of Capt. Albert C. Olmsted Marker (historical marker)
- Mohawk Area #3 Marker (Rest Stop Overlook; historical marker)



- Jail Limit Marker (historical marker)
- Western Supreme Buddha Temple
- Bellinger's Orchard
- Fonda Little League Park
- Winnie School (Ilene Wagner's House)
- Saint Kateri National Shrine and Historic Site

### Montgomery County Scenic Byways

Several local roadways within the VSA are recognized in Montgomery County legislation as county scenic byways. These scenic byways are listed below and are discussed in detail within the VIA in Section 10.1.1.4, Visibility of Solar Arrays from Public Roads. Furthermore, additional attention has been provided to a number of these resources through the development of LOS profiles and photo-simulations.

- Auriesville Road (CR 122) (See VP 42 photo-simulation; LOS L1 and L3 in Attachment 3 of the VIA)
- Fisher Road (CR 118) (See VP 47 of Facility Photolog in Attachment 3; LOS L2 in Attachment 3 of the VIA)
- Hickory Hill Road (CR 33) (See VP 92 of the Facility Photolog (Attachment 2 of the VIA))
- Hyney Hill Road (CR 123) (See VP 25 of the Facility Photolog (Attachment 2 of the VIA))
- Ingersoll Road (CR 117) (See VPs 44, 45 and 68 photo-simulation in Attachment 2 of the VIA)
- Logtown Road (CR 110) (See LOS L2 and photo-simulation VP 80 in Attachment 2 of the VIA)
- Noeltner Road (CR 164) (See VP 36 of the Facility Photolog (Attachment 2 of the VIA))
- Noeltner Spur (CR 166)
- Stone Arabia Road (CR 34)

- Van Epps Road (CR 116) (See VPs 45 and 98 photo-simulation in Attachment 3 of the VIA; VPs 2, 3, 11, 45, and 97 of the Facility Photolog (Attachment 2 of the VIA))

Refer to Section 10.1.1.2, Visibility of Solar Arrays at Identified Resources, Section 10.1.1.3, Visibility of Solar Arrays at Local Resources, and Section 10.1.1.4, Visibility of Solar Arrays from Public Roads, of the VIA (Appendix 8-1) for a complete assessment of predicted visibility at identified visual resources.

### **(11) Cumulative Effects**

A cumulative visual impact analysis is required to be performed per Section 900.2.9 (a). Please refer to Section 13.0, Cumulative Effects, of the VIA (Appendix 8-1) for the complete assessment of cumulative effects. Cumulative effects are discussed in the VIA based on available data related to recent and proposed utility development within the VSA. A map is provided as Figure 6 of the VIA to depict the approximate locations of each development in relation to the Facility. Aside from the proposed Facility, there are three utility development projects in total within the VSA, two that are recently built and one that is proposed. These recently built or proposed utility projects are described below and evaluated, as practicable, for cumulative effects in conjunction with the Facility.

#### **Mill Point Solar II Project**

The proposed Mill Point Solar II Project is being pursued by ConnectGen Montgomery County LLC. This proposed utility-scale solar energy facility is expected to generate 100 MW of renewable energy within the Town of Glen in Montgomery County, however, land acquisition and lease agreements are ongoing and therefore a proposed design is unavailable.

Several unknowns regarding design and location of a proposed action can profoundly affect where predicted visibility may occur. A cumulative assessment of the Mill Point Solar II Project and the proposed Facility would likely result in a misrepresentation of potential cumulative visibility. Therefore, a cumulative visual impact analysis was not practicable to perform. However, based on the approximate location of the Mill Point Solar II Project (see Figure 6 of the VIA) to the Facility, and the overlay of predicted Facility visibility located within this general area, it is assumed that cumulative visibility may occur, but as mentioned, the exact location of cumulative visibility is unknown and a cumulative assessment of the Mill Point Solar II Project and proposed Facility would consist of unsubstantiated results.

### Van Epps & Mohawk View Community Solar – Eden Renewables

Eden Renewables recently constructed (2022) two adjacent solar facilities consisting of a 10 MW renewable energy project and energy storage system located on the western side of 677 and 709 Van Epps Road in the Town of Glen (see Figure 6 of the VIA). In spatial relationship to the Facility, the existing community solar facilities are adjacent to Van Epps Road and the closest proposed Facility solar array is adjacently west (or behind) the Eden Renewables solar facilities when facing west from Van Epps Road. Field verification confirmed that visibility to the nearest Mill Point Solar I Facility component is limited by the presence of the existing Eden Renewables solar facility. To cumulatively assess the Eden Renewables solar facilities in conjunction with the proposed Mill Point Solar I Facility, a photo-simulation was prepared from Van Epps Road (see VP98 in Attachment 3 of the VIA). The results of the simulation demonstrate that a minor section of the Mill Point Solar I Facility is visible. The character of the Eden Renewables solar facilities subsumes any appearance of the Mill Point Solar I Facility to where viewers would unlikely recognize any visual change.

Transient views from the traveling public of the subject solar facilities will likely occur in delayed succession, depending on the traveler's planned destination or route. For example, travelers heading northbound on Van Epps Road from the intersection of Fisher Road may briefly view the Mill Point Solar I Facility and then moments later discern the existing Eden Renewables solar facility. Not all roadways in the VSA will experience cumulative and transient views of both solar facilities. According to a plan graphic available on the Van Epps & Mohawk View Community Solar website (Van Epps & Mohawk View — Eden Renewables 2021), if installed, the proposed landscaping of these projects (consisting of native trees and shrubs) would likely supplement a diminishment of the existing Eden Renewables projects.

### Marcy – New Scotland 345 kV Transmission Line

The Marcy – New Scotland 345 kV transmission line spans from the Town of Marcy to the Town of New Scotland. Within the VSA, this existing transmission line traverses through the Towns of Root and Glen. Photographs documenting the characteristics of the existing transmission line are presented in the Facility Photolog (Attachment 2 of the VIA) as VPs 6, 50, 69, 92, and 93. As described in Section 2.0 of the VIA, the Facility will interconnect into this transmission line. In general, the Facility is sited slightly south of the transmission line, however, a few solar array areas are sited slightly north of the transmission line (see Figure 6 of the VIA). Because of the relatively tall heights of the existing transmission H-frame structures (approximately 150 to 200

feet) and the close geographic location of the structures in relation to the proposed Facility, cumulative views are expected to occur and are documented in several photo-simulations (VPs 42, 44, 61, 80, 94; see Attachment 3 of the VIA). As depicted in the simulations, most cumulative visual contrast is noted within Distance Zone 1 when vantage points are proximal to the Marcy – New Scotland 345 kV transmission line (identified as H-frame structures within the photographs) and the proposed Facility (see VP 42), whereas vantage points within Distance Zone 2 will generally experience less cumulative visual contrast (see VPs 61 and 94). However, variable cumulative visibility is expected within Distance Zone 1. For example, the VP 44 photo-simulation demonstrates that in approximately 5-years post construction during warmer seasons (leaf-on condition), the Facility’s proposed landscaping obstructs the majority of the solar arrays and fencing. VP 80 is also within Distance Zone 1 and depicts a partially open view to the Facility and existing transmission line where cumulative visual contrast may be more apparent, but less overall in comparison to VP 42 (which is closer to the existing transmission line). Therefore, it is expected that most cumulative effects will occur when in close vicinity to the Marcy – Scotland 345 kV transmission line and Facility. However, as demonstrated in the VP 44 simulation, proposed landscaping may interfere with cumulative views of the Facility and Marcy – New Scotland 345 kV transmission line and will reduce visible aspects of the Facility. As mentioned, most cumulative views will occur when in immediate vicinity to both the Facility and Marcy – New Scotland 345 kV transmission line where visual contrast already exists due to the characteristics of the tall transmission structures, therefore negative cumulative effects are expected to be relatively minor.

#### 2621 State Highway 5S Solar Project (New Leaf Energy)

New Leaf Energy is proposing a 5MW community solar facility south of the Hamlet of Auriesville within the Town of Glen (see Figure 6 of the VIA). Viewshed results of the Facility were not predicted to occur near or from the 2621 State Highway 5S Solar Project, therefore, cumulative views will not occur for the proposed Facility and 2621 State Highway 5S Solar Project.

### **8(b) Viewshed Analysis**

#### ***(1) Viewshed Mapping, Light of Sight Profiles, Distance Zones, and Landscape Similarity Zones***

Viewshed mapping was completed in conformance with Section 900-2.9 (b)(1). The viewshed maps were prepared using recent edition topographic base mapping and are presented on a recent edition 1:24,000 scale map. See Section 8(b)(2) of this Exhibit below for the viewshed analysis methodology which leveraged LiDAR data and included surface information such as

vegetation and topography. As described previously, two distinct viewshed analyses were prepared to evaluate components of the Facility: one analysis was completed for the solar arrays and its supporting infrastructure, and a second analysis completed for the substation, POI switchyard, and associated transmission structures (referred to as the “POI components”). A complete summary of viewshed mapping methodology is provided in Section 7.1, Viewshed Analysis, of the VIA (Appendix 8-1). The viewshed maps are presented in Figure 4 (Potential Visibility and Visual Resources for Solar Arrays) and Figure 5 (Potential Visibility and Visual Resources for the substation, POI switchyard, and transmission structures) of the VIA (Appendix 8-1). These figures depict visibility within two miles of the Facility Site, existing topography, LSZs, distance zones, visually sensitive resources including public vantage points and cultural and historical resources, existing vegetation and associated screening effects, LOS profiles, and representative viewpoints that were used in the simulation process. A discussion of viewshed mapping results is provided in Section 10.1, Viewshed Results and Discussion, of the VIA (Appendix 8-1).

As described above, landscape similarity zones (LSZs) were identified and are presented on the viewshed maps. The 2019 USGS National Land Cover Dataset (NLCD) was accessed to establish LSZs to categorize distinct landscape types within the VSA. These NLCD data were further enhanced by utilizing a combination of aerial photo interpretation and ground truthing to validate the accuracy of the NLCD data as needed. To view a map of the delineated LSZs within the VSA, please see Figure 2 of the VIA: Landscape Similarity Zones Map. Overall, this effort resulted in the definition of five LSZs within the VSA which are identified as Zone 1 Agricultural, Zone 2 Forested, Zone 3 Developed, Zone 4 Open, and Zone 5 River Corridor. The definition and description of each LSZ is available in Section 5.0 of the VIA, and viewshed results for solar arrays within LSZs are discussed in Section 10.1.1.1 of the VIA.

In addition to LSZs, Distance Zones were also established and are presented on the viewshed maps. Distance zones were established within the VSA for assessing and determining visual effects over discrete distances and are required as cited in Section 900-2.9 (b)(1) of the 94-c Regulations. These zones have been defined in documents produced by the U.S. Forest Service or the Bureau of Land Management (BLM). However, certain procedures or guidelines may be inapplicable to the northeast and are more appropriate for western landscape applications. Therefore, discretion must be used when selecting distance zones as the effects of distance highly depend on the characteristics of the landscape. Furthermore, the magnitude of the proposed action must also be considered when assigning distance zones. For example, solar

panels exhibit a smaller profile and sit lower in the landscape as opposed to mature trees, two-story buildings, or transmission structures that assume taller heights. Therefore, distance zones for this Facility have been judiciously modified from the U.S. Forest Service Handbook to accommodate the extents of the VSA, the limitations of human vision, and the low-profile scale of the Facility components. Two distance zones were established within the VSA and are identified as Distance Zone 1 and Distance Zone 2. A description of each distance zone is provided in Section 4.0 of the VIA and viewshed results for solar arrays within distance zones are detailed in Section 10.1.1.1 of the VIA.

In addition to the viewshed mapping described above, LOS profiles were performed to address state aesthetic resources, fulfilling Section 900-2.9 (b)(1). According to Table 8-4 above, there are five State resources that may receive views of the Facility. LOS profile analyses were prepared from all five state resources (LOS profile L2 of Attachment 3 of the VIA contains four individual vantage points to the Facility as illustrated by the orange, green, blue, and red sight line). These LOS profiles have been conducted from state resources and traverse through several additional state resources (see Attachment 3 of the VIA). See Section 8(b)(2) of this Exhibit below for the LOS profile methodology. A complete summary of LOS profile methodology is provided in Section 7.2, Line of Sight Analysis, of the VIA (Appendix 8-1). The LOS profiles are presented in Attachment 3, Photo-Simulations and Line of Sight Profiles, of the VIA (Appendix 8-1). A discussion of LOS profile results is provided in Section 10.2, Photo-Simulation and LOS Results and Discussion, of the VIA (Appendix 8-1). A summary of LOS profile results is provided in the paragraphs below.

#### Discussion – Line of Sight Results

##### **L1 – Mohawk River, New York State Barge Canal Historic District, View Southwest (LSZ 5; Distance 3.48 miles, Distance Zone 2)**

The LOS L1 profile (see Attachment 3 of the VIA) was performed from within Distance Zone 2 at the Mohawk River which is recognized as the New York State Barge Canal Historic District (NRHP-listed). This LOS was delineated in a southwest direction at a length of 3.48 miles to the solar array. Several additional visual resources are noted along the LOS path and include the Erie Canalway Trail, Snowmobile Trail (C7P), and NYS Bicycle Route 5, however, as shown in the LOS L1 profile, none of these resources will discern the Facility because of intervening topography and existing forest.

As mentioned, the LOS originates from the Mohawk River, which is also known as the New York State Barge Canal Historic District, where a minor amount of potential solar array discernability was detected. As seen in the LOS L1 profile, a few solar arrays may be distinguishable at the crest of hill located over 3.48 miles away from the Mohawk River. At this substantial distance, solar panels are expected to contribute minorly to the landscape and may not be perceived by viewers due to limitations (acuity) of human vision. At these far viewing distances, objects in the background become homogenous in form and shape and textures and colors are subdued due to atmospheric haze. Therefore, a majority of the visitors who use this area of the Mohawk River for recreational boating and/or paddling will not discern the Facility, nor will the qualities or characteristics of the New York State Barge Canal Historic District be visually affected.

**L2 – Covenhoven House, View Northwest (LSZ 1,2,3; Distance 1.58 miles; Distance Zone 2)**

The LOS L2 profile (see Attachment 3 of the VIA) originates from the NRHP-listed Covenhoven House located on 141 Reynolds Road in the Town of Glen. The observer in the LOS is oriented northwest to a solar array approximately 1.53 miles away. This LOS profile additionally traverses through resources such as the NYS (S72) Snowmobile Trail and the NRHP eligible Glen Village Cemetery. According to the results of the LOS L2, all three resources may discern a small, confined number of solar arrays at a far distance above tree canopies, but not the entirety of the Facility. Please see VP 26 of the Facility Photolog in Attachment 2 of the VIA for a representative view adjacent to the Covenhoven House toward the direction of where the Facility would be potentially visible (over 1.53 miles away). The Covenhoven House is privately owned, therefore public access and potential viewers are infrequent and limited to few in number.

The LOS L2 also demonstrates a vantage point from the NYS S72 Snowmobile Trail which is denoted by a green line that extends from the snowmobile trail to the visible solar array. This section of the S72 Snowmobile Trail crosses over private land in a northeast to southwest direction and a recreational viewer accessing this limited and brief area of trail would need to direct their attention approximately 90 degrees to the northwest to view the Facility. Therefore, users of this snowmobile trail are unlikely to experience a glimpse of the distant solar array when traveling at moderate speeds as attention is generally focused on the forward direction of travel.

The Glen Village Cemetery (NRHP eligible) viewer's position depicted in the L2 LOS is from an unobstructed and publicly accessible viewing area of the cemetery. From this position, a small group of solar arrays may be discernible as indicated by the red perspective line within the LOS.

Typical viewer groups may be those visiting the cemetery to mourn, or individuals interested in the historic setting and character of the cemetery. Due to the notable distance of the observer at the cemetery to the visible solar array (0.9-miles) (see VP 29 of Facility Photolog; Attachment 2 of the VIA), it is unlikely a viewer would distinguish the Facility.

**L3 – Fonda Cemetery, View Southeast (LSZ 2,3,4; Distance 3.98 miles; Distance Zone 2)**

LOS L3 profile (see Attachment 3 of the VIA) was performed from the Fonda Cemetery (NRHP eligible), adjacent to Cemetery Road in the Village of Fonda. This LOS is oriented southeast where a few solar panels were predicted to be distinguishable at a far distance of approximately 4 miles. Even though visibility was predicted to occur, the appreciable distance at which a relatively small number of solar panels may be visible would be particularly difficult for most individuals to identify within the landscape. This is due to the limitations of human vision and real-time atmospheric effects of the local weather conditions (e.g., atmospheric haze, fog, or accumulation, etc.) that affect the ability to perceive slim profile objects (solar arrays) within the context of other larger landscape components (e.g., dwellings, structures, and forested vegetation). Additionally, foreground vegetation and dwellings are present in and around the Fonda Cemetery, which may further interrupt a direct view to the visible solar array.

Several other visual resources were identified along the LOS pathway including the Revolutionary Trail Scenic Byway (NY5), the Fonda Speedway and the Montgomery County Fairgrounds, the New York State Barge Canal Historic District, the Erie Canalway Trail, NYS Bicycle Route 5, and the Maple Avenue Cemetery. These resources do not contain views of the Facility within the extents of the LOS profile due to intervening structures, mature vegetation, and topography.

***(2) Viewshed Analysis and Line of Sight Profile Methodology***

To accurately assess visual impacts of the Facility, two distinct viewshed analyses were completed: one to assess predicted visibility of the solar arrays, and one to assess predicted visibility of the substation, POI switchyard, and associated transmission structures (referred to as the “POI components”). These viewshed analyses were developed to evaluate the potential visibility of proposed Facility infrastructure within the VSA which are detailed as follows:

1. Solar Arrays: This analysis accounted for the tallest possible configuration of the solar arrays. The VIA utilized and evaluated a tracker racking system with solar array panel heights conservatively set to a value of 10 feet above finished grade at maximum tilt.



Additional Facility components including inverters, sound walls, access roads, and perimeter fencing are represented in this viewshed model. The final resulting output identifies geographic areas from which viewers would potentially see all or some part of the proposed solar panels.

2. Substation, POI Switchyard, and Transmission Structures: This viewshed analysis collectively assessed visibility from the substation, POI switchyard, and associated transmission structures, which are herein referred to as “POI components”. As described in Section 2.0 of the VIA, one generation tie (gen-tie) line is proposed to connect the substation to the POI switchyard, and two discrete transmission lines are proposed to facilitate interconnection from the POI switchyard to the existing Marcy-New Scotland 345 kV transmission line. The heights and geographic position of the proposed transmission structures were included in the viewshed and range from 135 to 195 feet in height. The POI switchyard and substation are proposed in the immediate vicinity of the transmission structures. The tallest heights of the substation and POI switchyard are identified as 70-foot lightning masts at the substation and 70-foot H-frame takeoff structures (which simultaneously serve as lightning masts) at the POI switchyard. Lower heights of various components within each substation were also incorporated into the viewshed model, for example, such as bus work (31 to 36-foot height) and bus support structures (31 to 36-foot height). Plans and sections of the POI components are available in Plan 6B, Attachment 6 of the VIA, and Exhibit 5.

The viewshed analyses for the solar arrays and POI components incorporate topography, existing buildings, and existing trees and have been produced to convey predicted visibility within the VSA per Section 900-2.9(b)(1), as it gives the most reasonable and realistic depiction of the surrounding Facility landscape. The viewshed analyses also account for proposed grading and tree clearing associated with Facility construction. The results of these analyses provide the focus of visibility discussion in visual impact assessments because of the inherent aspects of reproducing realistic conditions when LiDAR datasets are used, as described below.

To develop the viewshed model, ESRI Spatial and 3D Analyst GIS software were used. For the analysis, publicly available LiDAR point cloud data was obtained for it is the best available elevation data as it includes high resolution accurate ground elevations in addition to building heights and individual tree heights that offer realistic physical visual impediments as they occur in the landscape. The model was further developed by establishing an observer height of 6 feet and the assumption that the Facility would not be visible to a viewer who is standing amongst

trees in a forested area. The final resulting output identified those areas from which viewers would potentially see all or some part of the proposed Facility components.

A complete summary of viewshed mapping methodology is provided in Section 7.1, Viewshed Analysis, of the VIA (Appendix 8-1). The viewshed maps are presented in Figure 4 (Potential Visibility and Visual Resources for Solar Arrays) and Figure 5 (Potential Visibility and Visual Resources for the substation, POI switchyard, and transmission structures) of the VIA (Appendix 8-1). A discussion of viewshed mapping results is provided in Section 10.1, Viewshed Results and Discussion, of the VIA (Appendix 8-1).

As described in Section 8(b)(1) above, LOS profiles were completed to address state aesthetic resources, fulfilling Section 900.2.9 (b)(1). This regulation states specifically that LOS be completed for statewide resources of concern. There are five state resources predicted to distinguish the Facility within the VSA, all of which were incorporated in the LOS analyses. Also, local resources were evaluated within the LOS profiles; three Montgomery County Scenic Byways were identified within the demarcated pathway of the LOS profiles.

To develop the LOS profiles, elevation data obtained for the Facility noted above in the viewshed methodology was used for the data source. ArcGIS Pro 3.0.2 and Global Mapper 23.0 were used to produce linear elevation profiles sampled across select sight lines for bare earth topography and for vegetation. The final LOS sections were enhanced and embellished in Adobe Illustrator 2023.

A complete summary of LOS profile methodology is provided in Section 7.2, Line of Sight Analysis, of the VIA (Appendix 8-1). The LOS profiles are presented in Attachment 3, Photo-Simulations and Line of Sight Profiles, of the VIA (Appendix 8-1). A discussion of LOS profile results is provided in Section 10.2, 10.2, Photo-Simulation and LOS Results and Discussion, of the VIA (Appendix 8-1). Section 8(b)(1) of this Exhibit, above, provides a summary of LOS profile results.

### **(3) Viewer Group Overview**

It is important to evaluate the characteristics of potential viewers to understand the importance and effect of visual change. There are several factors that may influence an observer's visual attentiveness of the environment and is dependent on viewer elevation, the types of activities pursued, the frequency of the viewing action, and the duration of view. The result of evaluating

viewer characteristics provides useful information about the public's anticipated level of sensitivities to a proposed action.

Overall, higher degrees of visual sensitivity are correlated with areas where people live and with people who are engaged in recreational outdoor pursuits or participate in scenic driving. Conversely, areas of industrial or commercial use are considered to have low to moderate visual sensitivity because the activities conducted are not significantly affected by the quality of the environment. Views and viewer groups are discussed throughout the VIA in the context of aesthetic resources, viewshed visibility results, and Facility simulations.

These concepts are applied when evaluating the visual landscape and assessing the importance of a viewpoint location if it falls in an area of visibility. Consequentially, the identification of viewer groups is established and defined below.

### **Identification of Viewer Groups**

Types of viewers will vary by geographic region, as well as by travel route or use areas, such as a developed recreation site, urban area, or a residential property. Viewer groups are identified below and include:

**Local Constituency:** This group represents residents inhabiting and expending a significant amount of time in the local area and/or surrounding communities. These people may include local residents and members of groups to which the local area is important in different ways. Also included in this group are those who may occupy a camp or summer home in the area during the warmer seasons.

**Commuter/Area Traveler Constituency:** People who use or are generally restricted to travel corridors that are destination oriented toward places of employment. These people generally have transient short duration views. This group also includes area travelers which are people strictly engaged in inter-regional or out of state travel for business, leisure, vacation, or other purposes.

**Visitor or Recreational Constituency:** Individuals who visit the area to experience its natural appearance, cultural landscape qualities, recreational opportunities, or for commercial/business activities. Visitors may be of local, regional, or national origin.

The following additional viewer characteristics are applicable to each defined viewer group:

Viewer Sensitivity – Viewer sensitivity is distinguished among viewers in residential, recreational/open space, tourist commercial establishments, and workplace areas, with the first two typically experiencing high sensitivity to visual change.

Number of viewers – The degree of sensitivity is typically correlated to the number of viewers affected by a change. Information about precise number of viewers is not always readily available, however it can be reasonably assumed based on presence of development, recreational space, accessibility to public spaces, and through other data sources as follows.

- Table 1A of the VIA, Population of Communities within VSA (see Section 3.1 of VIA, Appendix 8-1)
- Table 1B of the VIA, Housing Density of Communities within VSA (see Section 3.1 of VIA, Appendix 8-1)
- Table 2 of the VIA, Available Traffic Data within the VSA (see Section 3.4 of VIA, Appendix 8-1)

It is reasonable to estimate if a particular location is a high public use area or if it is a location that is less frequently visited, or more inaccessible where the public is not expected to be present (such as swamps or places absent in amenities). Generally, a village or city typically contains a higher concentration of viewers than suburban or rural places.

Duration of view – Duration of view is the amount of time a viewer would actually be looking at a particular landscape feature. Depending on the viewer activity (see below), the duration of view may be extended (static or stationary view), or it may be momentary (fleeting or transient view). Typically, a momentary duration of view involves mobilization of a viewer.

Viewer activities – Viewers within the VSA will experience different viewing times of the Facility depending on the priorities and objectives of an individual's activity. Distinct viewing durations of the Facility can be estimated by the types of viewer groups identified within a particular location. For example, fleeting views or those traveling by means of a vehicle are expected to have views endured for a lesser amount of time whereas those who may be in a fixed position (e.g., fishing, camping, resting on a park bench) may experience a longer duration of view.

Context of Viewer – The characteristics and quality of an observer’s visual environment may influence or diminish the impression of a visual change. Typically, a visual change may not be as compelling if the change is harmonious with the character of the existing environment. Whereas existing man-made infrastructure or development within a landscape may have the propensity to absorb or visually distract a viewer’s attention to visual change.

**(4) Important and Representative Viewpoints**

Viewpoint selection criteria are established in Section 900-2.9(b)(4) under (i), (ii), (iii), (iv), and (v). The Applicant’s consultant conducted three site visits (on April 8, 2021, April 18, 2022, and April 14, 2023) to capture representative viewpoint locations with applicability to the viewpoint selection criteria set forth in the 94-c Regulations. Specialized field crew strategically obtained photographs from discrete locations in the VSA in accordance with following regulatory requirements:

(i) Unobstructed views or direct line-of-sight. Preceding the initiation of each conducted site visit, viewshed maps illustrating predicted Facility visibility within the VSA were prepared to facilitate the identification of vantage points containing direct line-of-sights to the Facility. While conducting each site visit, field verification methods were utilized while onsite to identify suitable viewpoint locations with unobstructed views. This process involves identifying distinct and existing landmarks features (e.g., barn silos, buildings, clearing cuts, or transmission structures) within the Facility Site, to which is subsequently used as a visual reference to orient oneself to the Facility. To the extent practicable, representative viewpoint locations were judiciously selected for the preparation of photo simulations from the most unobstructed views to the Facility. Examples of unobstructed views that were simulated include VPs 42, 44, 45, 61, 68, 80, 94, and 98 (see Attachment 3 of VIA).

(ii) Significance of viewpoints, designated scenic resources, areas or features. Sensitive resources were identified within the VSA and tabulated (see Table 8-3 and Table 8-4 above). This process involved a meticulous review of federal, state, and local places of interest that are accessible to the public, may experience high volume of public use, and exhibit aesthetic characteristics or qualities. Additional resources of county and local concern were incorporated into the tables subsequent of an information request sent to stakeholders on September 27, 2021 and April 20, 2023 (see Attachment 4 of the VIA for outreach correspondence). Several municipal websites were also consulted to review

planning documents for locally designated resources that occur in the VSA. The results of the resource inventory were then cross referenced with the viewshed results to quantify viewpoints near resources that may experience predicted visibility. This criterion was then applied to the viewpoint selection process, resulting in photo simulations from VPs 42, 44, 45, 61, 68, 80, 94 and 98 (see Attachment 3 of the VIA).

(iii) Level of viewer exposure. To the extent the Facility is visible, viewpoint locations were identified from populated places where viewers may congregate and/or travel routes that may experience an increased number of public viewers. Publicly available AADT data provisioned by the NYSDOT was consulted to identify roadways experiencing high volumes of daily traffic (refer to Section 3.4, Transportation, and Table 2 of the VIA). The U.S. Census Bureau 2020 Decennial Census was also referenced to select viewpoints from populated places (see Table 8-1 and 8-2 above). Further information regarding population densities within the VSA can be found in Section 3.1 Community/Residential of the VIA. Representative viewpoints simulated from populated places and/or places of higher user activity where visibility may occur are listed as VPs 61, 80, and 94 (see Attachment 3 of the VIA). Level of viewer exposure is additionally discussed throughout the results of the VIA.

(iv) Proposed Land Uses. Proposed non-Facility development information was investigated and identified within the VSA. These data were extracted from municipal meeting minutes filed online from various town, village, and county websites. Information pertaining to proposed non-Facility land use can be found in Section 3.6 of the VIA. An applicable cumulative view of the proposed Facility and utility development unrelated to the Facility are depicted in VPs 42, 44, 61, 80, 94, and 98 (see Attachment 3 of the VIA). Further discussions of cumulative effects are provided in above in Section 8(a)(11) of this Exhibit.

(v) Assessment of visual impacts pursuant to the requirements of adopted local laws or ordinances. As outlined in Section 1.2 of the VIA, the Glen Solar Law (Town of Glen 2022) requires that a visual assessment will use computer modeling and photography showing existing conditions to thoroughly assess the visibility of the solar array from “key observation points” also known as viewpoints, to be approved by the Town of Glen Planning Board. As mentioned in Section 6.1, visual stakeholders were provided the opportunity to append additional viewpoint locations and/or recommend existing viewpoint

locations as candidates for developing photo-simulations. The Town of Glen was explicitly solicited for the recommendation of candidate photo-simulations (please see Attachment 4 of the VIA for stakeholder correspondence). On July 27, 2023, the Town of Glen Supervisor responded to the information request via letter but did not elect viewpoint candidates for photo-simulations due to “[the belief that] any offerings of additional location of photo opportunities will unlikely alter or infuse any new revelations of appreciable visual impact”. Photographic overlays, also referred to as photo-simulations, or “simulated views,” have been completed with proposed landscaping and are accessible in Attachment 3 of the VIA. The photo-simulation methodology is provisioned in Section 7.3.1 of the VIA, and a discussion of the photo-simulations is available in Section 10.2.1 of the VIA.

### **8(c) Visual Contrast Evaluation**

#### ***(1) Facility Simulations***

The following subsections describe the results of each photo-simulation associated with potential changes to the character of the view, the identification of discernible Facility components, categorization of viewer constituency, and frequency of use. Simulations are presented as sets of existing and proposed conditions based on VP number and can be found in Attachment 3 of the VIA (Appendix 8-1). The simulations in Attachment 3 include illustration of proposed landscaping mitigation at approximately 0 to 2 years and 5 years subsequent to construction. Each simulation depicts the proposed position of each planting in the proposed Landscape Plan. According to the Landscape Plan presented in Appendix 5-2 of Exhibit 5, Design Drawings, and abbreviated in Attachment 6, Plan 6A, of the VIA (Appendix 8-1), fully mature heights of the year-round coniferous species could possibly reach heights up to 40 to 60 feet in future years. To depict the seasonal changes of vegetation that affect viewer perception of the Facility, both leaf-on and leaf-off mitigation was shown at each time frame in each photo-simulation viewpoint location.

A complete description of photo-simulation methodology is provided in Section 7.3, Photographic Simulations, of the VIA (Appendix 8-1). The simulations are presented in Attachment 3, Photo-Simulations and Line of Sight Profiles, of the VIA (Appendix 8-1). A discussion of photo-simulation results is provided in Section 10.2, Photo-Simulation and LOS Results and Discussion, of the VIA (Appendix 8-1). A summary of photo-simulation results is provided in the paragraphs below.

**VP 42, Auriesville Road (Montgomery County Scenic Byway), View Northeast – Glen (LSZ 1,2,3; Distance 380 feet)**

*Existing Conditions*

VP 42 is representative of what travelers or residents may experience from Auriesville Road where there are several arrays around the viewer in a rural agricultural setting. During the visual stakeholder outreach initiative (please refer to Section 6.1 of the VIA), one local stakeholder expressed concern regarding views from Auriesville Road, which is recognized as a Montgomery County Scenic Byway, therefore, this selected viewpoint provides information regarding the visual change that one may experience from this road.

*Proposed Conditions*

In the proposed condition with landscaping (0 to 2 years), Facility components are visible in the middle ground of the view, to the left and right (north and east) of Auriesville Road. In the center and right of the photograph, to the east of Auriesville road, several solar arrays are visible in a former agricultural field. Additional Facility components can also be seen, including a detention basin, perimeter fencing, and landscaping. In the left portion of the photograph, to the north of Auriesville Road, portions of a few solar arrays can be seen in former agricultural fields. The view of the Facility on the left side of the photograph is moderated by distance, existing telecommunication lines, and existing residential structures. The view to the distant landscape consisting of the Mohawk Valley, Adirondack Park, and Western Supreme Buddha Temple remains unchanged after development of the Facility. In general, most viewers will be comprised of travelers (527 AADT) where only ephemeral and partial views of the solar arrays are expected due to speed of travel (55 mph). A few residential dwellings are located within this area; where solar array visibility is predicted, existing tree hedgerows and proposed landscaping near the properties will likely reduce views to the solar arrays. As shown in Table 8-5 below, the proposed conditions, 0 to 2-year landscaping, leaf-on simulation received an average visual contrast rating of 15.7 out of 27, indicating that moderate visual contrast is introduced due to the Facility. However, proposed landscaping will provide visual moderation and softening of the solar arrays upon completion of Facility construction and increasing overtime, particularly during leaf-on conditions. During warm seasons and in due time, the proposed landscaping is anticipated to minimize the visible extents of the Facility from this general area of Auriesville Road.



**VP 44, Ingersoll Road (Montgomery County Scenic Byway), Square Barns Corner, View North Northeast – Glen (LSZ 1,3; Distance 305 feet)**

From Ingersoll Road and in the vicinity of NYS Route 30A, VP 44 represents a vantage point from the Square Barns Corner community in the Town of Glen. This viewpoint is 1.25 miles north northwest from the Hamlet of Glen and is approximately 430-feet from the nearest residential dwelling, found northeast from the viewer.

*Existing Conditions*

The existing condition photograph depicts a harvested corn field. Although not distinguishable due to impeding topography, NY30A traverses laterally near the background forested vegetation. Topography in the view is mostly level with minor undulating terrain gently receding away from the observer. The background environment is confined to the interfering mature deciduous and coniferous species forming a linear band. A single existing transmission structure is interspaced between the vegetation. This transmission structure is attributed to Marcy – New Scotland 345 kV transmission line. As shown in Table 8-5, the existing conditions photograph received an average scenic quality rating of 0.8 out of 3, representing weak scenic quality.

*Proposed Conditions*

With the Facility in the view, several solar arrays follow in succession in repeated form, shape, and color. The background is partially intersected by the Facility but does not completely obstruct or shorten the continuous view to the background forest. The blue colors of the solar arrays and green colors of the landscaping are compatible with the existing blue sky and earth tones of the existing environment, thereby limiting the amount of visual contrast seen within the view. According to the rating panel results in Table 8-5 the proposed conditions, 0 to 2 year landscaping, leaf-on simulation received an average visual contrast rating of 15.8 out of 27, representing moderate visual contrast.

As shown in the simulation with proposed landscaping (0 to 2 years), the plantings will provide visual moderation and softening of the solar arrays when the Facility is constructed and during warmer seasons when foliage is present, most of the Facility will be screened in approximately 5 years after construction. As depicted in Table 2 of the VIA (Appendix 8-1), Ingersoll Road is one of the least traveled roadways in the VSA (AADT 99). Therefore, a relatively small and limited number of local travelers will be affected. Local residents dwelling on Ingersoll Road will likely sustain longer static views of the Facility, however, as mentioned, during warmer seasons and in

due time, the proposed landscaping will minimize the visible extents of the Facility from this general area of Ingersoll Road.

**VP 45, Van Epps and Ingersoll Road (Montgomery County Scenic Byway), View South Southeast – Glen (LSZ 1,3; Distance 480 feet)**

VP 45 was photographed from the intersection of Van Epps Road and Ingersoll Road, facing south-southeast. This VP was selected for simulation as it provides a representative view of the Facility from Van Epps Road (CR 116) and Ingersoll Road (CR 117), both a designated Montgomery County Scenic Byway. Additionally, this VP provides a view inclusive of a residential dwelling. This VP is located in Distance Zone 1, approximately 480 feet from the nearest visible solar panel.

*Existing Conditions*

In the existing conditions photograph, Van Epps Road is partially seen on the right side of the image where a paved road sits on the crest of a distant hill. A white dwelling is seen on the left side of the image. When viewing the photo, the foreground is comprised of green mowed lawn, a paved driveway, and a gravel driveway, which are framed by the white dwelling to the left and a large evergreen to the right. The midground recedes in elevation to an empty agricultural field where a few existing landscape trees are found abutting the field's edge. The field quickly slopes up to the background where a visible horizon is formed, consisting of the top of the agricultural field, sky, and a distant hill encompassed in forest vegetation. Electrical transmission wires are partially discernible as they laterally intersect the visible sky. As shown in Table 8-5, the existing conditions photograph received an average scenic quality rating of 1 out of 3, representing weak scenic quality.

*Proposed Conditions*

In the proposed condition simulation with 0 to 2 year landscaping, Facility components are visible in the center middle ground of the view, behind the white residential dwelling. In the center of the photograph, several solar arrays are visible in a former agricultural field, rising in elevation to the top of a small hill. Additional Facility components can also be seen, including perimeter fencing and landscaping. In the background of the view, the distant dark grey colored hill is no longer discernible, and portions of the existing horizon are obstructed by solar arrays.

As shown in Table 8-5, the proposed conditions, 0 to 2 year landscaping, leaf-on simulation received an average visual contrast rating of 18.2 out of 27, indicating that moderately strong

visual contrast is introduced due to the Facility. This rating suggests that the Facility's moderately strong visual contrast will affect the weak scenic qualities of existing conditions. As illustrated in the VP 45 photo-simulation, landscaping is proposed around the solar arrays within the view and will provide visual moderation and softening of visual contrast, but unobstructed views to the Facility will remain after 5-years post-construction due to the elevated positions of the viewer and solar arrays. Although limited in number, residents and commuters traveling through this area of Ingersoll Road (AADT 99) and Van Epps Road (AADT 527) will likely have partial fleeting views of the solar arrays. There are two residential dwellings in the vicinity of this vantage point; both will likely experience long durational views of the solar arrays from limited back portions of their respective properties.

**VP 61, Rest Stop Overlook, NY5 (Revolutionary Trail Scenic Byway), View South Southwest – Mohawk (LSZ 1,3; Distance 2.15 miles)**

This viewpoint is located at the Rest Stop Overlook adjacent to NY5 (Revolutionary Trail Scenic Byway). Within the context of the VSA, this elevated viewpoint conservatively represents southwardly views from the most elevated sections of NY5. This viewpoint also represents a limited area that visibility is predicted on NY5 between the Village of Fonda and Tribes Hill.

*Existing Conditions*

When viewing the existing conditions photograph, the foreground consists of mixed land use of agricultural and a small amount of greenspace, where amenities such as picnic tables are available. The midground is comprised of rural aggregated development consisting of dwellings and buildings and two large horizontal groups of mature trees divide open agricultural lands and development area. A distant and partially prominent landform is discernible where several agricultural fields and isolated farm steads dot the landform's slope. From this particular vantage point, views of the Mohawk River are precluded by foreground topography and existing deciduous vegetation. As shown in Table 8-5, the existing conditions photograph received an average scenic quality rating of 2 out of 3, representing moderate scenic quality. This rating indicates that the NY5 Rest Stop Overlook has moderate scenic qualities.

*Proposed Conditions*

When viewing the proposed condition, the Facility is found within a few distant beige fields in the background of the photograph. Due to the distance of the visible Facility from this location (2.15 miles), individual textures and details of the solar panels are replaced by simple linear forms and dark blue colorations that mimic similar forms and colors of the existing forest and tree hedgerows

found in adjacent fields. The physical presence of solar panels do not impede the ability to observe the Mohawk Valley and the distant rolling hills. As shown in Table 8-5, the proposed conditions, 0 to 2 year landscaping, leaf-on simulation received an average visual contrast rating of 6.7 out of 27, representing weak visual contrast. This rating means that the appearance of the Facility will not cause a significant negative visual effect to the NY5 Rest Stop Overlook's scenic value.

**VP 68, Ingersoll Road (Montgomery County Scenic Byway), View North Northwest – Glen (LSZ 1,3; Distance 175 feet)**

VP 68 is located on Ingersoll Road in Glen, approximately 175 feet south of a small solar array. This viewpoint is in the vicinity of several residences beyond the extents of the photograph, one located immediately behind viewer to the south, one to the east, and two roughly 840 feet to the west. The vantage point is oriented toward the proposed substation and transmission structures.

*Existing Conditions*

The existing conditions photograph is oriented to the north-northwest into an open agricultural field of cultivated corn row crops, visible within the foreground and middle ground of the photograph. In the background, intermediate deciduous tree hedgerows obstruct partial sight lines to a distant agricultural field bounded by a dense forest comprised of mixed deciduous and coniferous trees. As shown in Table 8-5, the existing conditions photograph received an average scenic quality rating of 0.8 out of 3, representing weak scenic quality.

*Proposed Conditions*

In the proposed condition simulation with 0 to 2 year landscaping, Facility components are visible in the middle ground and background of the view. In the middle ground of the view, portions of twelve solar arrays can be seen, tilted away from the viewer. Additionally, the perimeter fence and landscaping mitigation can also be seen. In the background of the view, some trees have been removed from the right portion of the photograph to facilitate Facility construction. Additionally, one transmission pole of the proposed transmission structures can be seen just above the horizon.

As shown in the simulation, proposed landscaping will provide visual moderation and softening of the solar arrays upon completion of Facility construction and increasing overtime, particularly during leaf-on conditions. As shown in Table 8-5, the proposed conditions, 0 to 2 year landscaping, leaf-on simulation received an average visual contrast rating of 19.3 out of 27, indicating moderately strong visual contrast due to the Facility. However, when reviewing the

simulation with landscaping shown in 5-years post-construction, visibility of the solar arrays and perimeter fence is nearly fully mitigated by the presence of landscaping vegetation, thereby reducing most of the discernible contrast. During warm seasons and in due time, the proposed landscaping will further minimize the visible extents of the Facility from this general area of Ingersoll Road.

**VP 80, Glen Historic District, NY 161 (Mill Point Road), View North Northwest – Glen (LSZ 3,4; Distance 0.49-mile)**

This vantage point is representative of what may be observed from areas of predicted visibility from within the Glen Historic District, as well as the Hamlet of Glen. The VP 80 photograph was captured from the Glen Reformed Church, a NRHP-listed historic building. This representative condition conveys an open or unobstructed view of the solar array. It is not guaranteed that other places in the Hamlet of Glen will have clear views to the Facility due to potential obstructions such as vegetation or single trees located on or near residential properties. For example, as noted in the VP 80 existing conditions, distant buildings or vegetation, such as the distant stark-white building and/or tree vegetation may interfere with direct views to the Facility. Leaf-on vegetated conditions during warmer seasons may further mitigate views of the Facility. As mentioned in Section 6.0 of the VIA, on July 14, 2023, OPRHP determined there will be “no above ground concerns, as the solar array visibility from the Glen Historic District will be limited”.

*Existing Conditions*

When viewing the existing conditions photograph, the foreground consists of manicured lawn, residential fencing, and a few coniferous trees. As the view is elevated, midground building rooftops are more prominent due topography change and color contrast (blue/gray roofs) against the tans and browns of the agricultural fields. Also, in the midground are a few strands of isolated mature trees and local overhead electric structures running intermittently along or near the partially visible roadway (Auriesville Road). One can also note the existing Marcy to New Scotland 345 kV transmission line as indicated by the H-frame structures found above the distance beige field. The background is comprised of a distant landscape with views to the Mohawk Valley and the foothills of the Adirondack Mountains. Separation of the midground and background are clearly evident by the line and color of the agricultural fields against the dark, blue hues of the distant landform. As shown in Table 8-5, the existing conditions photograph received an average scenic quality rating of 1.7 out of 3, representing moderate scenic quality.

### *Proposed Conditions*

As depicted in the proposed condition simulation, the solar array is identified as a blue horizontal form within part of the distant beige field. Isolated strands of deciduous trees, coniferous trees, and a white building collectively intersect and partially interrupt the direct view of the Facility. Compositionally, the Facility's color values (blue) are comparable to the distant landscape's blue hues, allowing the Facility to be partially absorbed and moderated. Existing structures and buildings within the view (blue and white metallic roofs) contribute to existing visual contrast against the view to the Mohawk Valley and foothills of the Adirondack Mountains. According to the rating results shown in Table 8-5, the proposed conditions, 0 to 2 year landscaping, leaf-on simulation received an average visual contrast rating of 11 out of 27, representing weakly moderate visual contrast. The proposed landscaping shown in 5-years post-construction provides a soft buffer to the sharp lines formed at the base of the solar arrays. As more time is allowed, the plantings will reach greater heights and further reduce the appearance of the Facility from this vantage point.

### **VP 94, NYS Route 5, Saint Kateri National Shrine and Historic Site, View South – Mohawk (LSZ 2,3,4; Distance 0.71-mile)**

The Saint Kateri National Shrine and Historic Site consists of several built structures, most notable is the NRHP-listed Tekakwitha Friary (H.D.F. Veeder House). Saint Kateri National Shrine and Historic Site, as terminology suggests, is not an officially recognized federal or state historical site, however, in lieu of official status, the site was included in the VIA and categorized as a local resource. Despite the above, the local resource categorization does not discount the Federally recognized NRHP-listed Tekakwitha Friary (H.D.F. Veeder House) resource found on the site.

### *Existing Conditions*

VP 94 was captured from within the Saint Kateri National Shrine and Historic Site from an elevated slope where greenspace meets existing forest. This viewpoint is in the vicinity of a gravel surfaced walking trail and is within distance to several religious statues and monuments. Along this sloped area of the site, several ornamental deciduous and coniferous trees in the foreground frame the view of the vegetated background hillside. The crest of the distant hill illustrates patches of open fields divided by tree hedgerows. Two existing H-frame transmission structures stand above the hill and continue beyond the extents of the photograph. Midground elements in the existing conditions photograph are comprised of isolated mature conifers, a moderate area of greenspace, a parking lot, and an ancillary building. As shown in Table 8-5, the existing conditions photograph

received an average scenic quality rating of 1.3 out of 3, representing weakly moderate scenic quality. It is likely the solar arrays would not be discernible during leaf-on conditions when user activity is usually the highest. Limited visibility to the Facility from the Saint Kateri National Shrine and Historic Site will not preclude visitors from enjoying the site's greenspace and amenities.

#### *Proposed Conditions*

With the Facility in place, a thin blue band consisting of solar arrays is intermittently distinguishable at the crest of the distant hill where several existing deciduous trees and bare tree canopies overlay with the solar array. Depending on the season, the Facility may not always be perceived from this vantage point. For example, the solar arrays will be less visible when seasons support the presence of leaf-on foliage when viewer activity is typically more prevalent, whereas colder months (as presented in the simulation) will sustain less viewer activity and an increase in Facility visual contrast. As shown in Table 8-5, the proposed conditions, 0 to 2 year landscaping, leaf-on simulation received an average visual contrast rating of 8.2 out of 27, representing weak visual contrast.

#### **VP 98, Van Epps Road (Montgomery County Scenic Byway), View West – Glen (LSZ 1,3,4; Distance 1,520 feet)**

VP 98 was photographed from Van Epps Road, facing west. This VP was selected for simulation as it provides a cumulative view of an existing solar generation facility (see above Section 8(a)(11) of this Exhibit) and the proposed Facility. Additionally, this VP provides a representative view of the proposed Facility from Van Epps Road (County Route 116), a designated Montgomery County Scenic Byway. This VP is located in Distance Zone 1, approximately 1,520 feet from the nearest visible solar panel.

#### *Existing Conditions*

In the existing conditions photograph, the foreground consists of an abundance of mowed grasses. In the middle ground of the photo, a portion of the existing Van Epps & Mohawk View Community Solar facility can be seen; this existing facility is not associated with the proposed Mill Point Solar I Facility. Visible components of the Van Epps and Mohawk View Community Solar facility include a perimeter security fence and several solar arrays. In the background of the photograph, a hedgerow of trees can be seen just above the horizon where a single H-frame structure is partially discernible. This structure is attributed to the existing Marcy – New Scotland 345 kV transmission line. As shown in Table 8-5, the existing conditions photograph received an average scenic quality rating of 0.8 out of 3, representing weak scenic quality.

### *Proposed Conditions*

When viewing the proposed condition visual change is mostly unnoticed, however, if close attention is provided to the center of the image where background vegetation is seen, a small portion of the Facility is juxtaposed within this vegetation. As shown in Table 8-5, the proposed conditions, 0 to 2 year landscaping, leaf-on simulation received an average visual contrast rating of 2 out of 27, representing very weak visual contrast.

Landscaping is not proposed in this view because of the presence of existing deciduous vegetation and existing solar facility (Van Epps & Mohawk View Community Solar) shielding views to the Facility. Additionally, according to a plan graphic of the Van Epps & Mohawk View Community Solar's website (Van Epps & Mohawk View — Eden Renewables 2021), if implemented, the proposed landscaping of these projects (consisting of native trees and shrubs) would likely supplement a diminishment of both existing and proposed facilities. Therefore, the viewers from Van Epps Road would unlikely discern any visual change from this view.

### **(2) Simulations Illustrating Mitigation**

As noted in Section 8(c)(1) above, photo-simulations have been prepared for select VP locations and are provided in Attachment 3 of the VIA (Appendix 8-1). As landscape screening is proposed to provide mitigation of potential visual impacts of the Facility, simulations have been prepared illustrating proposed landscaping mitigation in accordance with Section 900-2.9(c)(2). Included in the suite of simulations are those illustrating proposed leaf-off and leaf-on vegetative mitigation at 0 to 2 years and 5 years subsequent of construction. To demonstrate a range of post-construction scenarios, the following simulations are provided for each simulated VP:

- Representative Simulation with 0 to 2 Year Landscaping (Leaf Off)
- Representative Simulation with 0 to 2 Year Landscaping (Leaf On)
- Representative Simulation with 5 Year Landscaping (Leaf Off)
- Representative Simulation with 5 Year Landscaping (Leaf On)

The locations and visual representation of proposed landscaping shown in the simulations has been modeled according to the Facility Landscape Plan presented in Appendix 5-2 and abbreviated in Plan 6A, Attachment 6 of the VIA (Appendix 8-1). Section 11.11, Planting Plan, of the VIA (Appendix 8-1) summarizes proposed Facility landscaping for visual impact mitigation.



### **(3) Simulation Contrast Ratings**

Per the requirements of Section 900-2.9(c)(3), a professional rating board was established for the rating of potential visual contrast introduced by the Facility, scenic integrity of the landscape, and the evaluation of the effects pertaining to the proposed landscape mitigation surrounding the Facility.

Section 9.0, Visual Impact Rating Methodology, of the VIA (Appendix 8-1) summarizes the concepts and methodology applied to rating visual change caused by the proposed Facility through the process of evaluating photo-simulations. A full description of rating methodology, as well as panelist qualifications, is provided in Attachment 5, Photo-Simulation Visual Impact Rating, of the VIA (Appendix 8-1).

In completing this effort, three panelists evaluated and rated the simulations; Panelists 1 and 2 have been trained in the field of landscape architecture, and Panelist 3 is a landscape designer. All three individuals are experienced evaluators and have completed ratings on previous solar facility applications. Initial training on how to use the visual forms was performed and the intention of each category was explained to the panelists. The panelists were provided an existing conditions photograph and one proposed conditions simulation to assess and rated each simulated VP, comparing proposed conditions to existing conditions. To complete the rating, simulations illustrating representative views of the Facility with 0 to 2-year vegetative landscaping were rated against the existing condition photograph to evaluate contrast presented during the most visible conditions post-construction. Along with the simulations, to complete the ratings, Facility location information, including a Google Earth kmz file, was provided to help the panelists better understand and visualize the environment around a given viewpoint, which might otherwise have not been captured in the photo itself. The terrain and streetview features available on the Google Earth platform provided panelists the ability to discern if other residences or vegetation were present or in the vicinity while also allowing them to view different angles. The panelists then applied the contrast ratings singularly and independently without consultation with or from any other party.

The completed visual impact rating forms from each panelist are provided in in Attachment 5, Photo-Simulation Visual Impact Rating, of the VIA (Appendix 8-1). A discussion of visual impact rating results is provided in Section 10.3, Visual Impact Rating Results, of the VIA (Appendix 8-1).

Table 8-5 below summarizes and averages the final rating scores completed by rating panelists for Part 1 Visual Contrast, Part 2 Viewpoint Sensitivity, and Part 3 Existing Scenic Quality. For example, as illustrated in Table 8-5, VP 45 was identified as having a moderately strong visual contrast rating, weakly moderate viewer sensitivity rating, and weak scenic quality rating.

Overall, no VPs were rated to have strong visual contrast, viewer sensitivity, or scenic quality. Visual contrast ranged from very weak to moderately strong, viewer sensitivity ranged from weakly moderate to moderate, and scenic quality ranged from weak to moderate. VP locations that were rated to have the highest visual contrast (VP 68 and 45; moderately strong) had some of the lowest scenic quality ratings (weak). This implies that, although these locations are anticipated to have moderately strong views of the Facility, the Facility will not detract from any significant unique or scenic visual landscape. Similarly, the VP locations that were rated to have the highest scenic quality (VP 61, 42, and 80; moderate) had relatively low visual contrast (weak to moderate). This indicates that, at these locations where the existing landscape has moderate scenic quality, the visual contrast of the Facility is not anticipated to significantly detract from existing views.

For VPs where potential visual impacts of the Facility have been identified, minimization and mitigation measures, such as landscape screening, will be implemented as described in the VIMMP. For further information regarding the VIMMP, please refer to Section 11.0, VIMMP, of the VIA (Appendix 8-1) and Attachment 6, VIMMP, of the VIA (Appendix8-1).

**Table 8-5. Visual Impact Rating Results**

VP	Location	Rating Panelist 1			Rating Panelist 2			Rating Panelist 3			Average Ratings		
		Part 1 <sup>A</sup>	Part 2 <sup>B</sup>	Part 3 <sup>C</sup>	Part 1 <sup>A</sup>	Part 2 <sup>B</sup>	Part 3 <sup>C</sup>	Part 1 <sup>A</sup>	Part 2 <sup>B</sup>	Part 3 <sup>C</sup>	Avg Part 1 <sup>A</sup>	Avg Part 2 <sup>B</sup>	Avg Part 3 <sup>C</sup>
42	Auriesville Road (Montgomery County Scenic Byway)	17.5	12	2	15	12	1	14.5	13.5	2.5	<b>15.7 M</b>	<b>12.5 M</b>	<b>1.8 M</b>
44	Ingersoll Road (Montgomery County Scenic Byway)	15	11.5	1	16	11	0.5	16.5	10.5	1	<b>15.8 M</b>	<b>11 WM</b>	<b>0.8 W</b>
45	Van Epps Road & Ingersoll Road (Montgomery County Scenic Byway)	19.5	12.5	1	18	11	1	17	12	1	<b>18.2 MS</b>	<b>11.8 WM</b>	<b>1 W</b>
61	NY5, Rest Stop Overlook (Revolutionary Trail Scenic Byway and Mohawk Area #3 Marker)	6	13	2	3.5	11	1.5	10.5	15	2.5	<b>6.7 W</b>	<b>13 M</b>	<b>2 M</b>
68	Ingersoll Road (Montgomery County Scenic Byway)	17	10.5	1	19.5	10.5	0.5	21.5	11	1	<b>19.3 MS</b>	<b>10.7 WM</b>	<b>0.8 W</b>
80	Mill Point Road (Glen Reformed Church and Glen Historic District)	11.5	12.5	1.5	9.5	13	1	12	12.5	2.5	<b>11 WM</b>	<b>12.7 M</b>	<b>1.7 M</b>
94	Saint Kateri National Shrine and Historic Site	11.5	12.5	1.5	8.5	13	1	4.5	10	1.5	<b>8.2 W</b>	<b>11.8 WM</b>	<b>1.3 WM</b>
98	Van Epps Road (Montgomery County Scenic Byway)	0.5	11	1	2	11.5	1	3.5	9	0.5	<b>2 VW</b>	<b>10.5 WM</b>	<b>0.8 W</b>

VW=very weak, W=weak, WM= weakly moderate, M=moderate, MS=moderately strong, S=strong

<sup>A</sup>Part 1: Visual Contrast Rating (0 to 2 Years Post-Construction); <sup>B</sup>Part 2: Viewpoint Sensitivity Rating; <sup>C</sup>Part 3: Existing Scenic Quality Rating

#### **8(d) Visual Impacts Minimization and Mitigation Plan**

Section 900-2.9 (d) requires a VIMMP that includes proposed minimization and mitigation alternatives to mitigate and minimize visual impacts to the maximum extent practicable. The VIMMP outlines proposed measures the Applicant has implemented or will implement to reduce visibility of the proposed Facility including minimization and mitigation measures such as screening (landscaping), distance and property offsets, relocation or rearranging Facility components, and design lighting options for work areas and safety requirements. Please refer to Section 11.0 and Attachment 6 of the VIA to review the VIMMP.

##### **(1) Advertisements, Conspicuous Lettering, or Logos**

Other than warning and safety signs, no advertisements, conspicuous lettering, or logos will be permitted on Facility components.

##### **(2) Buried Electrical Collection System**

The collection system is proposed underground by either trenching or horizontal directional drilling (HDD).

##### **(3) Transmission Structures**

Transmission structures facilitating the POI shall have a non-glare finish. Use of a dark brown or green weathered steel dead-end structure shall be considered in the development of final engineered design.

##### **(4) Non-Specular Conductors**

Non-specular conductors shall be used for the transmission line, electric collection system, as well as the electrical substation equipment to reduce light reflectance.

##### **(5) FAA Wind Turbine Color Requirements**

Section 900-2.9 (a)(9) is not applicable to the Facility because it is a solar project.

##### **(6) Shadow Flicker for Wind Facilities**

Section 900-2.9 (a)(2) is not applicable to the Facility because it is a solar project. However, the applicable glare assessment (not associated to shadow flicker) was conducted for the Facility (see above Section 8(a)(9) of this Exhibit).

### **(7) Glare for Solar Facilities**

A Glare Analysis was prepared for the Facility to identify any potential glint and glare impacts on nearby residences and roadways (included in Appendix 8-1 as Plan 6C in Attachment 6). This analysis was prepared using ForgeSolar's GlareGauge software. This technology is based on the Solar Glare Hazard Analysis Tool (SGHAT) developed by the Federal Aviation Administration (FAA) in cooperation with the Department of Energy (DOE) and was enhanced for glint and glare assessments outside of the aviation industry.

The Glare Analysis evaluated the Fulton County Airport, 16 adjacent roadways, and 312 residential dwellings within the vicinity to the Facility. There are no predicted glare occurrences for nearby residences or roadways as a result of the proposed single axis tracking arrays. There are also no predicted glare occurrences for the Fulton County Airport approaches.

The Applicant proposes solar panels containing an anti-reflective coating.

### **(8) Planting Plan**

Vegetative mitigation, or screening, is generally an effective mitigatory option for reducing visual change. Solar arrays are often low-profile in height and have the propensity to be visually absorbed or screened by vegetative screening. Therefore, the proposed vegetative landscaping will minimize visual impacts in conformance with 19 NYCRR Section 900.2.9 (d). The Applicant is proposing a robust, detailed landscaping plan. Seasonality of vegetation, maturation of plantings, and availability of existing vegetation may improve the effects of screening. Seasonality coincides with leaf-on or leaf-off conditions of the vegetation, hence planting modules incorporate evergreens to minimize year-round views. Plant species are selected and installed at a specific age and size to foster vitality and adaptability, minimizing occurrence of die-off and replacement. The specific placement of the differing proposed planting modules are prioritized according to adjacent receptors that may experience sensitivity and visual contrast. The entire perimeter of the Facility was evaluated to identify adjacent receptors and study VP observation angles. The length around all perimeter fence lines have been assigned a particular planting module based on the adjacent receptor, area sensitivity, viewshed, and existing vegetation. Areas that contain existing vegetated buffers between the Facility and an observer or receptor may not necessarily require landscaping due to the natural screening effects of existing vegetation. If existing vegetation does not adequately screen the Facility, additional vegetation may be installed. In certain locations, the installation of landscaping may be prohibited such as at utility crossings or at driveway entrances due to safety or accessibility concerns.

The landscape plan was developed to utilize sustainable, hearty, and resilient plantings sourced from local vendors where possible and consists of native evergreen and deciduous tree and shrub species, along with pollinator grasses. To naturalize the appearance of the installed landscaping, ornamental, pollinator-friendly, and small trees and shrubs have been incorporated into the plan and are placed in front of larger species. The full plan can be obtained in Appendix 5-2 of Exhibit 5 Design Drawings. The following items and concepts were applied to the plan:

- Native/indigenous evergreen trees and pollinator-friendly deciduous shrubs and small ornamental tree species were selected for the vegetative buffer. Planted vegetation will need to reach a more mature height and width to provide appropriate visual screening while also maintaining minimum mature heights that will not shade Facility components, reducing power generation.
- Planting modules are proposed along the length of the outside of the perimeter fence of the Facility as noted on the Landscaping Plan. Three different vegetation template types (or modules) are proposed for an approximate total of 89,870 linear feet (approximately 17 miles comprising 2,290 deciduous trees, 3,993 evergreen trees, and 9,043 deciduous shrubs). The proposed planting templates are outlined below:
  - Landscape Module Template Type A - Typical Screening: This planting scheme provides a high density of plantings and is the most robust planting module intended for a maximum screening effect. This module is proposed for use for viewshed screening at sensitive receptors and non-participating residences. Approximately 2,937 evergreens trees, 893 deciduous trees, and 4,680 deciduous shrubs will comprise the Type A landscape module and will be implemented along 33,330 linear feet of the Facility perimeter, approximately 37% of the overall proposed installed landscaping length. Please refer to Appendix 5-2 of Exhibit 5 Design Drawings for an illustrative representation of this planting template.
  - Landscape Module Template Type B – Supplemental Screening: This planting scheme provides a medium density of plantings proposed for use mostly along roads that traverse the Facility or as a buffer for viewsheds that do not contain a sensitive receptor or an adjacent resident. A total of approximately 1,056 evergreens trees, 1,397 deciduous trees, and 4,363 deciduous shrubs will comprise the Type B landscape module and will be implemented along 27,235 linear feet of the Facility perimeter, approximately 30% of the overall proposed

installed landscaping length. See Appendix 5-2 of Exhibit 5 Design Drawings for an illustrative representation of this planting template.

- Landscape Module Template Type C – Naturalized Area Screening: This planting scheme consists of a naturalized screening effort with an emphasis on installing native and pollinator-friendly grasses for wildlife, pollinators, and songbirds. This planting scheme is proposed for use in areas along the Facility perimeter that do not contain a non-participating resident, sensitive receptor, or road. After desktop analysis and field verification, locations where this planting module is proposed contain no existing adjacent receptors where visual change could occur. This naturalized planting module will not be mowed so that over time, through the environmental succession process, taller woody species will occupy the area providing a vegetative buffer. Naturalized areas, however, are still subject to limited maintenance activities. This naturalized planting template will be implemented along approximately 29,305 linear feet of the Facility perimeter, approximately 33% of the overall installed landscaping length. See Appendix 5-2 of Exhibit 5 Design Drawings for an illustrative representation of this planting template.

The proposed plantings will sustain various growth rates (depending on the specific tree or shrub species) and are expected to realize additional growth heights between 7 to 13 feet in approximately 5 years after installation. Growth rates of plantings may continue unless a given plant has reached maturity.

It is important to note that an annual O&M effort will be provided to ensure that proper care and attention is given to the proposed plantings once installed. Annual O&M efforts will include, but are not limited to, selective pruning, mowing, and monitoring of invasive species. Additionally, notes in the Landscaping Plan (Appendix 5-2) provide further direction, recommendations, insight, and guidelines to ensure healthy, viable, and sustainable plantings throughout the life of the Facility.

### **(9) Lighting Plan**

The Substation and POI Switchyard Plan & Profile Drawings and Lighting Plan (see Plan 6B of Attachment 6) illustrates the proposed locations and positions of light fixtures, which are only intended for security, safety, and maintenance purposes. For the Facility, light fixtures are proposed within the substation and POI switchyard. The Lighting Plan was developed to minimize

light creep and runaway light while meeting lighting standards established by the National Electrical Safety Code (NESC). The proposed plan also complies with Occupational Safety and Health Administration (OSHA) requirements as proper illumination will be provided for all working spaces around the electrical equipment. All of which has been designed so that control points or persons making repairs will not be endangered by electrical hazards or other equipment.

Lighting has been designed to provide an average of at least 2 foot-candles to eliminate unnecessary light trespass beyond the POI and substation. Light fixtures will be mounted at a height of 30 feet and will not be illuminated during unoccupied periods. Full cut-off fixtures and task lighting will be used wherever feasible, as specified in the Lighting Plan. One candela is equivalent to one lit candle. A minimal 0.25 candela occurs at the extents of the light sources. The lighting plan addresses the following, as applicable:

- Manually activated lighting will be installed and available at the POI switchyard and substation to aid site security. Lights are located on such structures as the static masts. One light will also be mounted above the control building entrance. The Substation and POI Switchyard Plan & Profile Drawings and Lighting Plan (available in Plan 6B in Attachment 6) depict the light fixture locations, associated heights, and manufacturer specifications. Lights will be oriented downward to minimize potential impacts to surrounding receptors. Plan and profile figures demonstrate the lighting area needs and proposed lighting arrangement and illumination levels to sufficiently provide safe working conditions at the substation and POI switchyard site.
- Should task lighting be implemented during the occurrence of nighttime maintenance, lights will be directed to the ground and/or work areas to confine the total maximum nighttime lighting output. Temporary work area lighting will be shut down at night, unless required for security purposes.



## 8(e) References

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