



Mill Point
SOLAR I PROJECT

ConnectGen Montgomery County LLC

Mill Point Solar I Project

Matter No. 23-00034

§ 900-2.14 Exhibit 13

Water Resources and Aquatic Ecology

Revised August 2024

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Glossary 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

AC	Alternating current
AST	Aboveground storage tank
Bgs	Below ground surface
BMP	Best Management Practice
CMP	Complaint Management Plan
DC	Direct current
ECL	Environmental Conservation Law
EM	Environmental Monitor
eNOI	Electronic Notice of Intent
EPA	Environmental Protection Agency
EPC	Engineering, Procurement, and Construction
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FGDC	Federal Geographic Data Committee
FOIL	Freedom of Information Law
HDD	Horizontal directional drilling
ISCMP	Invasive Species Control and Management Plan
JD	Jurisdictional Determination
kV	Kilovolt
LOD	Limits of Disturbance
mg/L	milligrams per liter
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
NWP	Nationwide Permit
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O&M	Operations and Maintenance
ORES	Office of Renewable Energy Siting
PEM	Palustrine Emergent
PFO	Palustrine Forested
PJD	Preliminary Jurisdictional Determination
PSS	Palustrine Scrub-Shrub
PV	Photovoltaic
PUB	Palustrine Unconsolidated Bottom
REPH	Riverine Ephemeral
RIN	Riverine Intermittent
RUP	Riverine Perennial
SPCC	Spill Prevention, Control and Countermeasure
SPDES	State Pollutant Discharge Elimination System
SSA	Sole Source Aquifer
SWPPP	Stormwater Pollution Prevention Plan
UNT	Unnamed Tributary
USACE	United States Army Corps of Engineers
USCs	Uniform Standards and Conditions
USDA	United States Department of Agriculture
USGS	United States Geological Survey
WOTUS	Waters of the United States

WQC
WSA
WSCR

Water Quality Certification
Wetland Survey Area
Wildlife Site Characterization Report

EXHIBIT 13 WATER RESOURCES AND AQUATIC ECOLOGY

13(a) Groundwater

(1) Hydrologic Character

According to data from the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), the representative depth to the water table within the Facility Site ranges from zero to over 6.5 feet (>78 inches) below ground surface (bgs). The depth to restrictive layer within the Facility Site ranges from 1.3 to over 6.5 feet bgs (Figure 13-4). Data was obtained through the USDA NRCS Web Soil Survey tool, which lists depth to restrictive layers and water table by soil map unit for a given area of interest. Findings from onsite geotechnical investigations indicate that groundwater was observed at the time the investigation was conducted. Groundwater levels ranged from 2.5 feet bgs to 14.2 feet bgs. Groundwater above 3 feet bgs was attributed to possible perched water. Temporary dewatering may be required during construction if perched water, groundwater, or seepage is encountered. The Geotechnical Engineering Report, included as Appendix 10-1 of Exhibit 10 (Geology, Seismology and Soils), states that Standard Penetration Test (SPT) borings within the Facility Site encountered the presence of weathered rock at varied depths between 6.5 and 9.5 feet. Further information on the geology within the Facility Site can be found in Exhibit 10. Conditions encountered during subsurface investigations are generalized below in Table 13-1.

Table 13-1. Generalized Geotechnical Review Results

Description	Approximate Depth to Bottom of Stratum (feet)	Material Description	Relative Density/ Consistency
Stratum 1	0 to 2	Clay	Soft to Medium
Stratum 2	2 to 6	Clay	Medium to Stiff
Stratum 3	6+	Sand	Medium Dense/Very Stiff to Dense/Hard

Source: TRC Geotechnical Engineering Report 2021

(2) *Public and Private Groundwater Wells and Groundwater Aquifers and Groundwater Recharge Areas*

Information presented in this section outlines locations of identified and mapped groundwater sources. Data was obtained through a review conducted by the Applicant. The construction and operation of the Facility will be in compliance with the Uniform Standards and Conditions (USCs) under Section 94-c.

Well survey questionnaires were mailed to landowners of tax parcels within 1,000 feet of the Facility Site boundaries as required by the 94-c regulations, Section 900-2.14. Questions about the size, yield, depth, and quality of water obtained from well(s) on the property, well location in relation to any buildings on the property, any type of installed water treatment system, and whether any issues had ever occurred with wells identified on the property, were included in these questionnaires. The survey also contained a phone number to reach a consultant at TRC if the recipient had any questions. A stamped, self-addressed envelope was included to facilitate returns to TRC on behalf of the Applicant.

At the time of filing, 92 responses to the survey questionnaire were received. Of the 92 surveys received, in total, 115 wells were accounted for. Respondents who identified wells located on their parcel generally indicated that their wells produce high quality water. When low water quality was reported, the most common quality issue reported detailed a sulfur odor and/or taste. Others indicated a high iron content causing rusty coloration, methane odor, and black sediment in their water source. A copy of the well survey questionnaire sent to landowners is included in Appendix 13-2.

Mapped groundwater aquifers and well locations within the Study Area are illustrated on Figure 13-1.

Unconsolidated Aquifers

The United States Geological Survey (USGS) has completed hydrogeologic mapping in cooperation with New York State and local agencies. Unconsolidated aquifer distribution and hydrogeologic characteristics are presented at the 1:250,000 scale in a 5-map series that was published in 1988 in cooperation with the New York State Department of Environmental Conservation (NYSDEC). According to this map set, no unconsolidated aquifers are present within the Facility Site.

Sole Source Aquifers

Sole source aquifers (SSA) are defined by the Environmental Protection Agency (EPA) as aquifers that supply at least 50 percent of the drinking water for their service areas. There are no reasonable alternative drinking sources should these aquifers become contaminated. The Facility Site is not located within any SSA. The closest SSA, the Schenectady-Niskayuna SSA (Federal Register ID 50 FR 2022), is approximately 12 miles east of the Facility Site (USEPA n.d.).

Primary Aquifers

Primary aquifers are defined by the USGS and the NYSDEC as “highly productive aquifers presently utilized as sources of water supply by major municipal water supply systems” (NYSDEC1990). The Facility Site does not overlap any NYSDEC-listed primary aquifers. The Schenectady Aquifer is the closest primary aquifer to the Facility Site, located approximately 12 miles southeast of the Facility Site’s eastern limit.

Principal Aquifers

As defined by NYSDEC, principal aquifers are aquifers known to be highly productive or whose geology suggests abundant potential water supply, but which are not intensively used as sources of water supply by major municipal systems at the present time. The USGS defines a principal aquifer as “a regional extensive aquifer or aquifer system that has the potential to be used as a source of potable water” (USGS, 2003). The northern end of the Facility Site slightly overlaps with a single principal aquifer associated with the Mohawk River (Figure 13-1).

No adverse impacts to this aquifer are anticipated due to Facility construction or operation as appropriate erosion prevention and sedimentation control measures will be implemented during construction and operation. Control measures include a Stormwater Pollution Prevention Plan (SWPPP) and associated Best Management Practices (BMPs) that will be approved for the Facility. For further discussion on sedimentation control measures, see the preliminary SWPPP in Revised Appendix 13-3.

Groundwater Aquifers and Recharge Area

Figure 13-1 displays groundwater aquifers and groundwater wells, along with active water supply intakes within 100 feet of access roads and collection lines or within 200 feet of post-driving locations. Groundwater flow direction and wellhead and aquifer protections zones are shown within a 500-foot radius of the proposed Facility Site. No blasting is anticipated as part of Project

construction. Groundwater aquifers and recharge area data were obtained through the NYSDEC Division of Water Resources, Bureau of Water Management. Information pertaining to mapped groundwater aquifers is discussed in the section above. Information pertaining to groundwater wells is described below.

The USGS groundwater monitoring sites nearest to the Facility, local numbers Mt-411 and Mt-553 (USGS 425511074254001, 425624074210601), are located 1.75 miles west and 0.22 miles north of the Facility Site, respectively. According to data collected at these groundwater sites, the average annual depth to the sand and gravel aquifer's water level is 32.49 feet bgs at Mt-411 and 10.16 feet bgs at Mt-533.

Existing public water well locations and data on wells within the 5-mile Study Area were gained through a Freedom of Information Law (FOIL) (Public Officers Law, Article 6 Sections 84-90) request sent to the New York State Department of Health (NYSDOH) and the NYSDEC. An information request, including groundwater wells and their location, depth, construction logs, and descriptions of bedrock encountered within the Facility Site and Study Area, was sent to the NYSDOH, NYSDEC, and the Montgomery County Public Health Department on June 7, 2022 (Appendix 13-1)¹. The response received from the NYSDOH on June 23, 2022 indicated no records of public water wells within the Facility Site. The NYSDOH did indicate there are two public water systems near the Facility Site: The Rustic Red House (NY2830001) and the Stockyard Public House Restaurant (NY2820019). The NYSDEC response received on July 7, 2022, indicated that there are three NYSDEC wells within the vicinity of the Facility Site and Study Area. The NYSDEC Well IDs are MT762, MT901, and MT1218 (Appendix 13-1). The Montgomery County Public Health Department did not respond to the request.

The NYSDEC Division of Mineral Resources offers an online mapping application of water wells registered through the Water Well Contractor Program. This program requires any business conducting water well drilling activities to register annually with NYSDEC before doing business anywhere in New York State. The water well contractor must notify NYSDEC prior to commencement of drilling a water well and file a Water Well Completion Report with NYSDEC upon completion of a water well installation. The online mapping application was consulted to

¹ The FOIL request was sent out for a larger area than the current Mill Point Solar I Facility Site. Therefore, the results from this FOIL request are indicative of a broader survey area.

determine if any wells are located within the Facility Site and within a 1,000-foot radius. The results of the search concluded that there are no wells located on Facility Site parcels, but 16 wells are located within the 1,000-foot radius (NYSDEC 2022).

(3) Impacts on Groundwater Quality and Quantity

Permanent impacts to primary, principal, or SSA aquifers or groundwater are not anticipated as a result of construction and operation of the Facility. The potential for temporary and minor impacts to groundwater will be minimized or prevented altogether through the implementation of BMPs detailed within the SWPPP (Revised Appendix 13-3) and Spill Prevention, Control, and countermeasure (SPCC) plan that will be completed and submitted as a compliance filing prior to construction of the Facility. Although the Applicant has designed the Facility to reduce the potential for impacts and BMPs implemented during the construction and operations phases will further prevent and minimize impacts, localized impacts to groundwater is possible. These impacts could include:

- Minor degradation of groundwater quality from accidental spills;
- Minor localized disruption of groundwater flows;
- Groundwater migration along collection line trenches;
- Minor modification to surface runoff or stream flow, thereby affecting groundwater recharge characteristics; and
- Impacts to groundwater recharge areas (wetlands).

Certain construction activities have the potential to result in direct and/or indirect impact to surface waters. These activities include the installation of access roads, installation of collection lines, and the development of temporary staging areas and workspaces around the solar arrays. Impacts related to the construction of access road and collection line crossings will be minimized to the maximum extent practicable by crossing wetlands and streams at narrow locations where feasible and implementing BMPs. BMPs will also be implemented at temporary staging areas and workspaces.

The Facility will only add a small area of impervious surface, 42.94 acres (3.82 percent) of the fenced area or 3.38 percent of the limits of disturbance [LOD]), to the landscape through the placement of inverter pads, access roads, and the substation. These impervious areas will be

distributed throughout the Facility Site and will have, at most, a negligible effect on groundwater recharge for the local region. The installation of these impervious surfaces is typical of construction projects throughout New York State with methods approved by the NYSDEC. Pervious land cover vegetation will be established beneath the solar arrays and within the overall Facility Site as detailed within the Landscaping Plan (Exhibit 5, Appendix 5-2), which will allow for continued infiltration of stormwater runoff as it currently occurs under existing site conditions. In areas of the Facility Site that are currently used for agricultural purposes, the proposed vegetated ground cover beneath the arrays will allow for greater infiltration and treatment than areas regularly disturbed by agricultural practices.

A concrete batch plant will not be located onsite, and no concrete washout onsite will occur during the construction of the Facility. Proposed access roads are impervious and designed to distribute runoff as sheet flow to roadside buffers where it will infiltrate the groundwater. Groundwater may be encountered in poorly drained soils, areas with a characteristic shallow water table, areas which contain seasonally perched groundwater, or areas where semi-impervious layers of substrata do not permit groundwater to permeate deeply within the soil profile (i.e., aquitards and aquicludes). The ponding of surface waters and the pooling of water due to significant precipitation events could occur in open excavation areas or depressions during construction of the Facility.

Although no impacts to drinking water are anticipated because of Facility construction or operation, the Applicant will ensure that no post driving will occur within 200 feet of any identified active water supply. In accordance with the Section 900-6.4(n)(2) of the USCs, the Applicant will engage a qualified third party to conduct pre- and post-construction water quality testing for active potable water wells on lands for which the Applicant has been granted access. Testing will occur within specified distances from disturbances as follows:

- Collection lines or access roads within 100 feet of an existing, active water supply well or water supply intake;
- Pier or post installation points within 200 feet of an existing, active water supply well or water supply intake not requiring blasting; and
- At the location of any horizontal directional drilling (HDD) operation within 500 feet of an existing, active water supply well or water supply intake: and

- At the location of any blasting operation within 1,000 feet of an existing, active water supply well or water supply intake although, blasting is not anticipated.

If the results of the pre-construction testing indicate that federal and state standards for potable water are met (10 New York Codes, Rules and Regulations [NYCRR] Part 75, Appendix 75-c), but post-construction testing fails to meet those standards, the Applicant will work in consultation with the affected landowner(s) to construct a new well or otherwise reach a solution for the concern. Any newly constructed well shall be at least 100 feet from collection lines and access roads, and at least 200 feet from all other Facility components.

The Applicant will conduct pre- and post-construction testing of the potability of active water wells on nonparticipating properties (pending permission by property owner) within the distances from construction disturbance as specified in 19 NYCRR Section 900-6.4(n)(2) to ensure wells are not impacted by construction activities. In the unlikely event that impacts do occur, a new well will be constructed for the landowner as required by this section of the regulations.

13(b) Surface Water

(1) Surface Water Map

The locations of surface waters within the Wetland Survey Area (WSA), which includes areas within 100 feet of areas to be disturbed by construction, are mapped in Figures 13-2 and 13-3. Figure 13-2 displays features mapped in publicly available datasets from the NYSDEC, USGS, National Wetlands Inventory (NWI); while waterbody data collected during onsite wetland and waterbody delineations conducted from October 26 through November 20, 2020, May 10 through May 21, 2021, June 1 through June 3, 2021, November 1 through November 3, 2021, April 20 through April 21, 2022, April 28, 2022, and August 9, 2022, is shown in Figure 13-3.

(2) Stream Delineation Survey Reports

Surface waters, as well as general characteristics of the hydrology and character of the WSA, were detailed as part of wetland and waterbody delineations performed by TRC wetland biologists in 2020, 2021, and 2022. Prior to the field survey, TRC conducted a desktop review of publicly available data to determine the potential presence of federal and state mapped resources within the WSA. As part of delineation efforts, TRC identified and delineated 95 streams within the WSA (totaling 95,047 linear feet).

The ORES Surface Waters Jurisdictional Determination (JD) received on January 10, 2023 (Appendix 13-4), identified Auries Creek as a Navigable Water, which corresponds to TRC-delineated streams S-MJR-3, S-MJR-5, S-NSD-1, and S-CIW-3. The ORES JD also identified two unnamed perennial streams as Navigable Waters which correspond to TRC-delineated streams S-MJR-1 and S-NSD-62.

Additional information regarding delineation methodology, stream characteristics, as well as mapping and photographs of the water resources onsite are included in the Wetland and Stream Delineation Report included within Exhibit 14, Appendix 14-1.

(3) Surface Water Characteristics

The Facility is located within the NYSDEC-defined Mohawk River Basin major drainage basin. This major drainage basin is in Central New York State and occupies 3,460 square miles. The basin begins near the Adirondacks and the Tug Hill Plateau and follows the Mohawk River east for about 140 miles to connect with the Hudson River. The Facility Site is located within the USGS defined Mohawk sub-basin hydrologic unit code (HUC) 02020004, Cayadutta Creek-Mohawk River watershed (HUC 0202000410), the Yatesville Creek-Mohawk River sub-watershed (HUC 020200041003), and the Auries Creek-Mohawk River sub-watershed (HUC 020200041006).

The dominant surface water features within the Facility Site are tributaries to the Mohawk River. These streams flow north from the Facility Site into the Mohawk River, then continue flowing east towards Albany to connect with the Hudson River. Most aquatic features found within the WSA receive waters from precipitation events and agricultural runoff. Multiple NYSDEC Class C streams that extend from the Mohawk River are located within the WSA. The Mohawk River is located approximately 1.5 miles north of the WSA.

The Facility Site receives 44.8 inches of precipitation annually from 1981-2020's average based on information stored for the nearby town of Gloversville, New York located 8.5 miles north of the WSA (U.S. Climate Data 2020). In addition to precipitation, hydrology onsite originates from agricultural runoff and subsurface flow. The Facility Site predominantly drains to the northeast towards the Mohawk River.

The NYSDEC has classified waterbodies state-wide according to their best use, as either AA, AA(T), A, A(T), B, B(T), C, C(T), or D. Class AA or A waterbodies are of the highest water quality. AA or A classes indicate that the best uses of the waterbody are as follows: a source of water

supply for drinking, culinary, or food processing purposes, primary and secondary contact recreation, and/or fishing. The best usages of Class B waters are primary and secondary contact recreation and fishing. These waters shall be suitable for fish, shellfish, and wildlife propagation and survival. The best usage of Class C waters is fishing. These waters shall be suitable for fish, shellfish, and wildlife propagation and survival. The water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes. The best usage of Class D waters is fishing. Due to such natural conditions as intermittency of flow, water conditions not conducive to propagation of game fishery, or stream bed conditions, the waters will not support fish propagation. These waters shall be suitable for fish, shellfish, and wildlife survival. The water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes. Waters with classifications A, B, and C may also have a standard of (T), indicating that it may support a trout population, or (TS), indicating that it may support trout spawning events. Certain waters of the state are listed as protected due to their classification level.

Waterbodies with a classification of AA, A, or B, or with a classification of C with a standard of (T) or (TS) are collectively referred to as "protected waterbodies," and are subject to the provisions of the Protection of Waters regulations. Special requirements apply to sustain (T) and (TS) waters that support sensitive fisheries resources. Table 13-2 below lists NYSDEC-mapped waterbodies within the Facility Site and their state classifications. Figure 13-5 portrays their locations relative to the Facility Site. In addition to those NYSDEC-mapped waterbodies listed below, several small unnamed and unmapped (by NYSDEC) waterbodies and tributaries are also present within the Facility Site. Table 13-4 below lists the 95 delineated surface waters within the Facility Site including the six features identified by ORES as State jurisdictional and features assumed to be navigable Waters of the United States (WOTUS). ConnectGen is coordinating with United States Army Corps of Engineers (USACE) on a partial approved/preliminary jurisdictional determination for features on site, see Section 13(f)(2), below. No aquatic invasive species were identified within these surface waterbodies. Waterbodies within 100 feet of any Facility components have been mapped and identified on Figure 13-5.

A Hydrology Desktop Review and Scour Analysis was conducted for the Facility Site and is provided in Appendix 13-5. This analysis summarizes the findings from a desktop review of readily available public information to identify areas of scour potential and high flood inundation depths so the Applicant can better understand the risk of flood hazard affecting the proposed site

development. According to current Flood Insurance Rate Map (FIRM) panels published by the Federal Emergency Management Agency (FEMA), the Facility Site is located outside the 100-year floodplain of the Mohawk River. As illustrated in the FEMA FIRM panels provided, areas within the Facility Site are designated as Zone X – Area of Minimum Flood Hazard.

The Protection of Waters Program (Article 15 of the Environmental Conservation Law [ECL]) grants the NYSDEC regulatory jurisdiction over any activity that disturbs the bed or banks of protected streams. A stream, or portion of a stream, that has been assigned by the NYSDEC any of the following classifications or standards is considered a protected stream: AA, AA(T), A, A(T), B, B(T) or C(T) (6 NYCRR Part 701). Non-navigable Class C streams are not considered state protected streams under Article 15.

Table 13-2. NYSDEC-Mapped Streams within the Facility Site

NYSDEC Stream Name and Regulatory ID Number	NYS Major Drainage Basin	USGS Sub-basin Hydrologic Unit Code (HUC) 8 and Name	NYSDEC Classification¹ and Standard²	Linear Feet Within Facility Site
UNT ³ to Auries Creek 876-185	Mohawk River	Mohawk 2020004	C	16,476.53
UNT to Mohawk River 876-182	Mohawk River	Mohawk 2020004	C	5,085.41
Auries Creek 876-183	Mohawk River	Mohawk 2020004	C	8,191.60
UNT to Mohawk River 876-189	Mohawk River	Mohawk 2020004	C	604.21
UNT to Mohawk River 876-238	Mohawk River	Mohawk 2020004	C	4,281.13

¹A classification of AA or A indicates that the best use of the stream is as a source of water supply for drinking, culinary, or food-processing purposes, primary and secondary contact recreation, and fishing. The best usages of Class B waters are primary and secondary contact recreation and fishing. The best usage of Class C waters is fishing. Waters with a classification of D are generally suitable for fishing and non-contact recreation.

²Streams designated (T) indicate that they support trout, while those designated (TS) support trout spawning.

³Unnamed tributary (UNT).

As described above, the NYSDEC mapped streams within the Facility Site are limited to Class C classification. The NYSDEC establishes water quality standards criteria for specific substances, which are found in 6 NYCRR Part 703. In the absence of established water quality standards, numeric guidance values are derived and can be found in the guidance document for Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (NYSDEC 1998). NYSDEC water quality standards are defined in 6 NYCRR Part 703 and 704, and the Standards for Class C is provided in Table 13-3 below.

Table 13-3. NYSDEC Water Quality Standards

Parameter	NYSDEC Waterbody Classifications¹	Standard
Taste, color, and odor-producing, toxic, and other deleterious substances	C	None in the amounts that will adversely affect the taste, color, or odor thereof, or impair the waters for their best usage.
Turbidity	C	No increase that will cause a substantial visible contrast to natural conditions.
Suspended, colloidal, and settleable solids	C	None from sewage, industrial wastes, or other wastes that will cause deposition or impair the waters for their best usages.
Oil and floating substances	C	No residue attributable to sewage, industrial wastes, or other wastes, not visible oil film nor globules of grease.
Phosphorus and nitrogen	C	None in the amounts that will result in growths of algae, weeds, and slimes that will impair the waters for their best usage.
Thermal discharges	C	All thermal discharges to the waters of the state shall assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on the body of water.
Flow	C	No alteration that will impair the waters for their best usage.
pH	C	Shall not be less than 6.5 nor more than 8.5.

Parameter	NYSDEC Waterbody Classifications ¹	Standard
Dissolved Oxygen	C	For non-trout waters, the minimum daily average shall not be less than 5.0 milligrams per liter (mg/L), and at no time shall the dissolved oxygen concentration be less than 4.0 mg/L.
Dissolved solids	C	Shall be kept as low as practicable to maintain the best usage of waters but in no case shall it exceed 500 mg/L.
Total coliforms	C	The monthly median value and more than 20 percent of the samples, from a minimum of five examinations, shall not exceed 2,400 and 5,000, respectively.
Fecal coliforms	C	The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.
<p>Source: 6 NYCRR Parts 703.2, 703.3, 703.4, 704.1</p> <p>¹A classification of AA or A indicates that the best use of the stream is as a source of water supply for drinking, culinary or food processing purposes, primary and secondary contact recreation, and fishing. The best usages of Class B waters are primary and secondary contact recreation and fishing. The best usage of Class C waters is fishing. Waters with a classification of D are generally suitable for fishing and non-contact recreation.</p>		

During onsite wetland and stream delineations, the most common terrestrial invasive species observed include purple loosestrife (*Lythrum salicaria*) and common reed (*Phragmites australis*). These invasive plants are commonly associated with the edges of waterbodies or with wetlands. No aquatic invasive species were identified. Pursuant to Section 900-10.2(f)(4), and in compliance with 6 NYCRR Part 575, the Applicant will prepare and submit an Invasive Species Control and Management Plan (ISCMP) as a pre-construction compliance filing, including baseline mapping of all invasive species within 100 feet of the LOD and an identification of specific control, removal, monitoring, management, and disposal methods to be implemented for each identified invasive species.

Table 13-4 Delineated Surface Waters in the Facility Site

Stream Field Designation ⁴	Flow Regime Classification	Linear Feet within Facility Site ⁵	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification ¹ and Standard	Potential Jurisdiction ³	Waterbody ID Number (WIN)	Stream Order ²	Centroid Coordinates
S-CIW-1	INTERMITTENT	614	-	-	USACE	-	1	42.899 -74.345
S-CIW-2	PERENNIAL	2,987	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1	42.904 -74.350
S-CIW-3	PERENNIAL	2,590	Auries Creek 876-183	C	USACE/State	H-240-84	3	42.902 -74.354
S-CIW-4	INTERMITTENT	152	-	-	USACE	-	1	42.901 -74.354
S-CIW-5	INTERMITTENT	354	-	-	USACE	-	1,2	42.901 -74.354
S-CIW-6	INTERMITTENT	199	-	-	Non-jurisdictional	-	1	42.902 -74.353
S-CIW-7	EPHEMERAL	92	-	-	Non-jurisdictional	-	1,2	42.902 -74.353
S-CIW-8	INTERMITTENT	342	-	-	Non-jurisdictional	-	1	42.902 -74.352
S-CIW-9	INTERMITTENT	229	-	-	USACE	-	1	42.901 -74.352
S-CIW-10	EPHEMERAL	207	-	-	Non-jurisdictional	-	1	42.899 -74.353
S-CIW-11	EPHEMERAL	369	-	-	Non-jurisdictional	-	1,2	42.899 -74.355
S-CIW-12	INTERMITTENT	2,475	-	-	USACE	-	1	42.895 -74.354
S-KCF-1	INTERMITTENT	752	-	-	Non-jurisdictional	-	1,2	42.896 -74.355
S-KCF-2	EPHEMERAL	289	-	-	Non-jurisdictional	-	1	42.896 -74.355
S-KCF-3	EPHEMERAL	283	-	-	Non-jurisdictional	-	1	42.896 -74.357
S-KCF-4	INTERMITTENT	1,279	Auries Creek and Tribs	C	USACE	H-240-84	1	42.898 -74.366

Stream Field Designation ⁴	Flow Regime Classification	Linear Feet within Facility Site ⁵	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification ¹ and Standard	Potential Jurisdiction ³	Waterbody ID Number (WIN)	Stream Order ²	Centroid Coordinates
			876-185					
S-KCF-5	PERENNIAL	3,269	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1	42.916 -74.357
S-KCF-6	INTERMITTENT	1,853	-	-	USACE	-	1	42.912 -74.371
S-KCF-7	PERENNIAL	543	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1	42.922 -74.385
S-NSD-1	PERENNIAL	10,863	Auries Creek 876-183	C	USACE/State	H-240-84	3	42.916 -74.339
S-NSD-2	EPHEMERAL	77	-	-	Non-jurisdictional	-	1	42.922 -74.338
S-NSD-3	EPHEMERAL	2,375	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1,2	42.923 -74.333
S-NSD-4	INTERMITTENT	1,743	-	-	USACE	-	1	42.924 -74.335
S-NSD-5	EPHEMERAL	811	-	-	Non-jurisdictional	-	1	42.921 -74.337
S-NSD-6	EPHEMERAL	210	-	-	Non-jurisdictional	-	1	42.923 -74.333
S-NSD-7	EPHEMERAL	1,715	-	-	Non-jurisdictional	-	1	42.920 -74.336
S-NSD-8	EPHEMERAL	754	-	-	Non-jurisdictional	-	1	42.922 -74.333
S-NSD-9	EPHEMERAL	217	-	-	Non-jurisdictional	-	1	42.923 -74.332
S-NSD-10	EPHEMERAL	127	-	-	Non-jurisdictional	-	1	42.924 -74.331
S-NSD-11	EPHEMERAL	208	-	-	Non-jurisdictional	-	1	42.923 -74.329
S-NSD-12	EPHEMERAL	437	-	-	Non-jurisdictional	-	1	42.916 -74.341
S-NSD-13	INTERMITTENT	1,375	-	-	USACE	-	1	42.914

Stream Field Designation ⁴	Flow Regime Classification	Linear Feet within Facility Site ⁵	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification ¹ and Standard	Potential Jurisdiction ³	Waterbody ID Number (WIN)	Stream Order ²	Centroid Coordinates
								-74.342
S-NSD-14	INTERMITTENT	1,722	-	-	USACE	-	1	42.913 -74.332
S-NSD-15	EPHEMERAL	170	-	-	Non-jurisdictional	-	1	42.915 -74.337
S-NSD-16	INTERMITTENT	1,219	-	-	USACE	-	1	42.915 -74.339
S-NSD-17	EPHEMERAL	1,424	Minor Tribs to Mohawk River 876-238	C	USACE	H-240-90 thru 126	1,2	42.938 -74.394
S-NSD-18	EPHEMERAL	475	-	-	Non-jurisdictional	-	1	42.938 -74.395
S-NSD-19	EPHEMERAL	1,070	-	-	Non-jurisdictional	-	1	42.973 -74.389
S-NSD-20	EPHEMERAL	703	Minor Tribs to Mohawk River 876-238	C	USACE	H-240-90 thru 126	1	42.943 -74.390
S-NSD-21	EPHEMERAL	163	-	-	Non-jurisdictional	-	1	42.938 -74.393
S-NSD-22	INTERMITTENT	3,376	Minor Tribs to Mohawk River 876-189	C	USACE	-	1,2	42.937 -74.388
S-NSD-23	INTERMITTENT	2,304	Minor Tribs to Mohawk River 876-238	C	USACE	H-240-90 thru 126	1,2	42.941 -74.386
S-NSD-24	INTERMITTENT	798	-	-	USACE	-	1	42.933 -74.386
S-NSD-25	EPHEMERAL	567	-	-	Non-jurisdictional	-	1	42.934 -74.383
S-NSD-26	INTERMITTENT	864	-	-	USACE	-	1	42.942, -74.385
S-NSD-41	PERENNIAL	535	-	-	USACE	-	1	42.908 -74.370
S-NSD-42	INTERMITTENT	2,088	-	-	USACE	-	1	42.913 -74.365

Stream Field Designation ⁴	Flow Regime Classification	Linear Feet within Facility Site ⁵	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification ¹ and Standard	Potential Jurisdiction ³	Waterbody ID Number (WIN)	Stream Order ²	Centroid Coordinates
S-NSD-43	INTERMITTENT	169	-	-	USACE	-	1	42.914 -74.362
S-NSD-44	INTERMITTENT	1,183	-	-	USACE	-	1	42.910 -74.335
S-NSD-45	EPHEMERAL	479	-	-	Non-jurisdictional	-	1	42.907 -74.354
S-NSD-46	EPHEMERAL	1,723	-	-	Non-jurisdictional	-	1	42.906 -74.354
S-NSD-47	EPHEMERAL	402	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1	42.907 -74.366
S-NSD-49	INTERMITTENT	1,764	Minor Tribs to Mohawk River 876-238	C	USACE	H-240- 90 thru 126 (selected)	1	42.932346, -74.403728
S-NSD-50	EPHEMERAL	171	-	-	Non-jurisdictional	-	1	42.932196, -74.402869
S-NSD-51	EPHEMERAL	336	-	-	Non-jurisdictional	-	1	42.93267, -74.403434
S-NSD-52	EPHEMERAL	396	-	-	Non-jurisdictional	-	1	42.932007, -74.404368
S-NSD-53	EPHEMERAL	257	-	-	Non-jurisdictional	-	1	42.935537, -74.405059
S-NSD-54	EPHEMERAL	204	-	-	Non-jurisdictional	-	1	42.937026, -74.401938
S-NSD-55	INTERMITTENT	264	-	-	USACE	-	1	42.933039, -74.399139
S-NSD-56	INTERMITTENT	40	-	-	USACE	-	1	42.932552, -74.398469
S-NSD-57	INTERMITTENT	189	-	-	USACE	-	1	42.928341, -74.39479
S-NSD-61	INTERMITTENT	263	-	-	USACE	-	1	42.920106, -74.390345
S-NSD-65	PERENNIAL	2,625	Minor Tribs to Mohawk River 876-189	C	USACE	H-240- 71 thru 88 (selected)	1, 2	42.934959, -74.354384

Stream Field Designation ⁴	Flow Regime Classification	Linear Feet within Facility Site ⁵	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification ¹ and Standard	Potential Jurisdiction ³	Waterbody ID Number (WIN)	Stream Order ²	Centroid Coordinates
S-NSD-66	EPHEMERAL	568	-	-	Non-jurisdictional	-	1	42.935992, -74.352517
S-JMP-4	INTERMITTENT	1,063	Minor Tribs to Mohawk River 876-182	C	USACE	-	1	42.903972, -74.325089
S-JMP-5	INTERMITTENT	281	-	-	USACE	-	1	42.903238, -74.323138
S-JMP-6	INTERMITTENT	120	-	-	USACE	-	1	42.90308, -74.324065
S-JMP-7	PERENNIAL	1,278	Minor Tribs to Mohawk River 876-189	C	USACE	H-240- 71 thru 88 (selected)	2	42.903457, -74.323878
S-JMP-9	INTERMITTENT	170	-	-	USACE	-	1	42.913487, -74.343277
S-JMP-10	INTERMITTENT	1,330	-	-	USACE	-	1	42.909296, -74.343717
S-JMP-11	EPHEMERAL	639	-	-	Non-jurisdictional	-	1	42.910674, -74.328871
S-JMP-12	EPHEMERAL	203	-	-	Non-jurisdictional	-	1	42.927283, -74.323648
S-JMP-13	EPHEMERAL	25	-	-	Non-jurisdictional	-	1	42.926966, -74.323777
S-JMP-14	INTERMITTENT	851	-	-	USACE	-	1	42.927832, -74.324092
S-JMP-15	INTERMITTENT	240	Auries Creek and Tribs 876-185	C	USACE	H-240- 84	2	42.927747, -74.324746
S-JMP-16	EPHEMERAL	606	-	-	Non-jurisdictional	-	1	42.925425, -74.329592
S-JMP-17	EPHEMERAL	365	-	-	Non-jurisdictional	-	1	42.907385, -74.338542
S-JMP-18	INTERMITTENT	639	-	-	USACE	-	1	42.926774, -74.329955
S-JMP-19	INTERMITTENT	563	-	-	USACE	-	1	42.926545, -74.33113

Stream Field Designation ⁴	Flow Regime Classification	Linear Feet within Facility Site ⁵	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification ¹ and Standard	Potential Jurisdiction ³	Waterbody ID Number (WIN)	Stream Order ²	Centroid Coordinates
S-JMP-20	INTERMITTENT	162	-	-	USACE	-	1	42.913516, -74.342055
S-JMP-22	EPHEMERAL	171	-	-	Non-jurisdictional	-	1	42.921553, -74.327822
S-JMP-23	EPHEMERAL	192	-	-	Non-jurisdictional	-	1	42.920498, -74.329863
S-JMP-24	EPHEMERAL	173	-	-	Non-jurisdictional	-	1	42.919709, -74.330775
S-JMP-25	EPHEMERAL	197	-	-	Non-jurisdictional	-	1	42.919551, -74.331119
S-JMP-26	EPHEMERAL	120	-	-	Non-jurisdictional	-	1	42.926913, -74.323742
S-MLM-1	INTERMITTENT	692	-	-	USACE	-	1	42.925027, -74.3899
S-MLM-2	INTERMITTENT	197	Auries Creek and Tribs 876-185	C	USACE	H-240-84	1	42.916677, -74.376504
S-MLM-3	INTERMITTENT	205	-	-	USACE	-	1	42.914205, -74.378921
S-MLM-5	EPHEMERAL	18	-	-	Non-jurisdictional	-	1	42.90638, -74.352778
S-MLM-6	EPHEMERAL	21	-	-	Non-jurisdictional	-	1	42.907356, -74.35237
S-MLM-7	EPHEMERAL	405	-	-	Non-jurisdictional	-	1	42.907783, -74.349155
S-MLM-8	EPHEMERAL	554	-	-	Non-jurisdictional	-	1	42.909115, -74.346097
S-MLM-10	EPHEMERAL	321	-	-	Non-jurisdictional	-	1	42.907421, -74.346834
S-MLM-11	INTERMITTENT	516	-	-	USACE	-	1	42.907744, -74.347445
S-MLM-12	INTERMITTENT	1,503	-	-	USACE	-	1	42.904534, -74.347623
Total Stream Length Delineated:		82,121						

Stream Field Designation ⁴	Flow Regime Classification	Linear Feet within Facility Site ⁵	NYSDEC Stream Name and Regulatory ID Number	NYSDEC Classification ¹ and Standard	Potential Jurisdiction ³	Waterbody ID Number (WIN)	Stream Order ²	Centroid Coordinates
<p>¹A classification of AA or A indicates that the best use of the stream is as a source of water supply for drinking, culinary or food processing purposes, primary and secondary contact recreation, and fishing. The best usages of Class B waters are primary and secondary contact recreation and fishing. The best usage of Class C waters is fishing. Waters with a classification of D are generally suitable for fishing and non-contact recreation.</p> <p>² Stream order is reference to the Strahler stream order method.</p> <p>³ Potential jurisdictions were determined using the EPA's 2023 Conforming Rule and Article 24 of the New York ECL. This information is not an official determination of the jurisdictional status of the wetland and stream features within the Survey Area and is subject to agency review and approval. The ultimate authority to determine wetland and stream boundaries and jurisdiction lies with the USACE and the State.</p> <p>⁴ Note that streams S-CIW-3, S-MJR-3, S-MJR-5, and S-NSD-1 flow contiguously although they have unique stream field designations.</p> <p>⁵ Note that stream calculations differed slightly between TRC and the ORES jurisdictional determination. Although discrepancies may occur, the entirety of each feature identified as State jurisdictional by ORES are herein State jurisdictional. Differences in length calculations will not affect the jurisdiction of these features.</p>								

(4) Downstream Drinking Water Supply Intakes

The Applicant evaluated the potential for downstream drinking water impacts based on publicly available information regarding water supply intakes in relation to the Facility Site and the construction and operational methods anticipated for the Facility. Based on this review, no impacts to downstream drinking water supply intakes are anticipated.

Review of the DECinfo Locator indicated that there is one downstream drinking water supply located in the vicinity of the Facility Site (NYSDEC 2023). This drinking water supply is illustrated on Figure 13-1 and is located in the Village of Fultonville, approximately 0.5 mile north of the closest Facility Site parcel and approximately 4,270 feet from the closest Facility component. The most recent publicly available data for the Village of Fultonville public drinking water supply is a Water Withdrawal Reporting Form for the year of 2021. This water supply has a total of 327 water service connections serving 740 people. This water supply is withdrawn from two wells in the Village of Fultonville.

A water source used for agriculture is located towards the center of the Facility Site, in the Town of Glen (parcel ID: 68.-1-34). The most recent publicly available data for this water source is a Registration and Water Withdrawal Reporting Form for agricultural activities, dated March 28, 2022, for the year of 2021. Water from this source is drawn from two wells and three surface waters (ponds) and is used to service a single facility, R&R Farms/Dykeman and Sons, Inc.

(5) Avoidance of Impacts on NYS Protected Waters

The Applicant has sited Facility components to avoid or minimize temporary and permanent impacts to NYS protected surface waters to the maximum extent practicable. Facility components such as PV racking systems, inverters, transformers, and the Point of Interconnection (POI), as well as temporary laydown yards, are sited in upland areas at least 50 feet from NYS protected waterbodies. Where necessary, the Applicant has routed collection lines and access roads along previous disturbance corridors and designed access roads to conform with the native topography to minimize the need for soil disturbance, which can reduce the potential for sedimentation of surrounding surface waters. Where stream crossings cannot be avoided, overall impacts have been minimized by utilizing existing crossings or narrow crossing locations and co-locating road and electrical crossings, as practicable. Where existing stream crossings need to be replaced or enhanced, these crossings will be upgraded to meet NYSDEC standards. Stream crossings have also been designed to transect the stream at 90-degree angles, as practicable, to minimize loss

of stream segment and riparian corridors. All collection line routes that cross state regulated streams have been designed as underground crossings using HDD installation methods. The prescriptive utilization of HDD where feasible further minimizes crossing impacts to surface waters.

As described above, 95 streams were identified within the WSA during delineation efforts. Per the ORES JD received on January 10, 2023, three of the streams are state protected under ECL 15-0505 as they are considered Navigable Waters (S-MJR-3 & S-MJR-5 & S-NSD-1 & S-CIW-3 (all flow contiguously), S-MJR-1, and S-NSD-62). Impacts are not expected to occur to two of the streams (S-MJR-1 and S-NSD-62) as they are outside of the LOD and not located on parcels where components are sited. One watercourse, Auries Creek, will have no direct permanent or temporary impacts to the bed and/or banks because of collection line installation using HDD boring techniques. Therefore, the Facility anticipates no impacts to state regulated waterbodies.

According to Section 5(2)(b)(iii) of the 2022 Solar Energy Facilities Law of the Town of Glen (Glen Solar Law, Town of Glen 2022), the setbacks for jurisdictional wetlands, ponds, and streams are 100 feet except where streams or wetlands may need to be crossed by access roads or underground or aboveground utilities. Fencing, access roads, stormwater measures, electrical wiring and conduit (both above and below ground), and landscaping may occur within the setback. The Facility has been designed to avoid and minimize impacts to federal and state regulated streams to the maximum extent practicable. However, there are certain areas of the Facility where Facility components were sited within the 100-foot setback, therefore the Applicant is requesting a waiver from ORES for this provision as it is necessary for the impacted areas. See Table 13-5 below for an analysis on the stream setbacks within the Facility. For the Applicant's justification for requesting this local law waiver, see Exhibit 24, Appendix 24-5.

Table 13-5. Facility Components and Wetland Setbacks

Stream ID	Jurisdiction	Facility Component	Facility Component Setback from Stream (feet)	Waiver Request Needed?
S-CIW-1	USACE	Array Panels	315	No
S-CIW-2	USACE	Array Panels	55	Yes
S-CIW-3	USACE/NYSDEC	Array Panels	186	No
S-CIW-4	USACE	Array Panels	233	No
S-CIW-5	USACE	Array Panels	152	No
S-CIW-9	USACE	Array Panels	56	Yes
S-JMP-4	USACE	Array Panels	144	No
S-JMP-5	USACE	Array Panels	1,069	No
S-JMP-6	USACE	Array Panels	1,004	No
S-JMP-7	USACE	Array Panels	662	No
S-JMP-9	USACE	Array Panels	497	No
S-JMP-10	USACE	Array Panels	54	Yes
S-JMP-14	USACE	Array Panels	54	Yes
S-JMP-15	USACE	Array Panels	199	No
S-JMP-18	USACE	Array Panels	718	No
S-JMP-19	USACE	Array Panels	1,018	No
S-JMP-20	USACE	Array Panels	146	No
S-KCF-4	USACE	Array Panels	605	No
S-KCF-5	USACE	Inverters	54	Yes
S-KCF-5	USACE	Array Panels	158	No
S-KCF-6	USACE	Array Panels	317	No
S-KCF-7	USACE	Array Panels	63	Yes
S-MLM-1	USACE	Array Panels	156	No
S-MLM-2	USACE	Array Panels	1,149	No
S-MLM-3	USACE	Array Panels	195	No
S-MLM-11	USACE	Array Panels	91	Yes
S-MLM-12	USACE	Array Panels	86	Yes
S-NSD-1	USACE/NYSDEC	Array Panels	115	No
S-NSD-3	USACE	Array Panels	89	Yes
S-NSD-4	USACE	Substation	170	No
S-NSD-13	USACE	Array Panels	68	Yes
S-NSD-14	USACE	Array Panels	138	No

Stream ID	Jurisdiction	Facility Component	Facility Component Setback from Stream (feet)	Waiver Request Needed?
S-NSD-16	USACE	Array Panels	54	Yes
S-NSD-17	USACE	Array Panels	51	Yes
S-NSD-20	USACE	Array Panels	523	No
S-NSD-22	USACE	Array Panels	50	Yes
S-NSD-23	USACE	Array Panels	51	Yes
S-NSD-24	USACE	Array Panels	50	Yes
S-NSD-26	USACE	Array Panels	324	No
S-NSD-41	USACE	Array Panels	57	Yes
S-NSD-42	USACE	Array Panels	52	Yes
S-NSD-43	USACE	Array Panels	54	Yes
S-NSD-44	USACE	Array Panels	102	No
S-NSD-47	USACE	Array Panels	184	No
S-NSD-49	USACE	Array Panels	157	No
S-NSD-55	USACE	Array Panels	304	No
S-NSD-56	USACE	Array Panels	491	No
S-NSD-57	USACE	Array Panels	2,043	No
S-NSD-61	USACE	Array Panels	726	No

(6) *Minimization of Impacts on NYS Protected Waters*

During construction, temporary and permanent direct or indirect impacts to onsite surface waters may occur. Direct impacts are typically associated with the development of access roads and installation of collection lines. Indirect impacts to surface waters may result from sedimentation and erosion caused by construction activities.

State-jurisdictional streams and waterbodies will have a 50-foot buffer around them within of the proposed LOD to avoid direct impacts and prevent and minimize indirect impacts. NYS protected streams S-MJR-1 and S-NDS-62 are not located within the current LOD and will be avoided completely. One watercourse, Auries Creek, will have no direct permanent or temporary impacts to the bed and/or banks because of collection line installation using HDD boring techniques. Therefore, the Facility anticipates no impacts to state regulated waterbodies.

Direct impacts to streams have been avoided through the careful siting of Facility components away from resources. In addition, implementation of BMPs outlined in the SPCC Plan and SWPPP will avoid and minimize indirect impacts such as sedimentation.

(7) *Stream Restoration and Mitigation Plan*

As described above in sections (b)(5) and (6), all impacts to state-protected streams have been avoided through careful component siting and the implementation of proper setbacks. The proposed construction activities are not subject to compensatory mitigation and therefore a Stream Restoration and Mitigation Plan is not required for the Facility.

13(c) Stormwater

According to Section 5(2)(c)(a) of the Solar Energy Facilities Law of the Town of Glen (herein referred to as 'Glen Solar Law 2022') (Town of Glen 2022), the maximum lot coverage for public or private utility facilities without buildings is 20 percent.

According to the 'Lot Coverage' definition in the Glen Solar Law 2022, the lot coverage restriction is to address storm water runoff. Lot Coverage (For Solar Only) is defined as: "Solar panels are considered a disconnected impervious surface when water running off a panel is discharged to a pervious surface (e.g. turf, crop, perennial vegetation). Although the surface of solar panels is considered to be impervious, the solar panels as a whole qualify as disconnected impervious when a) there is pervious surface between each panel, and b) there is pervious surface beneath each panel. As rainfall drips off the solar panel's surface, much of it will infiltrate the pervious surfaces before it reaches an impervious surface such as a gravel path or road. Since Ground-Mounted Solar Energy Systems generally do not include much impervious surface, and since lot coverage requirements are designed, in large part, to reduce impervious surfaces and the run-off they create, this Solar Law measures lot coverage for a Ground-Mounted Solar Energy System by its actual impervious footprint, which results in a smaller measurement than the square footage of the solar panels."

Although the calculation of the lot coverage does not include the entire solar panel surface, this limitation is unnecessarily restrictive as solar panels do not result in broad impervious surfaces across the site. Unlike buildings, solar panels do not lead to excessive runoff of rainwater which could cause flooding and erosion. Further, the 20 percent calculation is complicated to apply to evolving solar panel technologies. For example, the mounting angle of tracking panels is not a

fixed angle making compliance difficult to calculate given the example provided in the law. Throughout the day the panels will be at various different angles and there is no set mounting angle. For example, at maximum tilt none of the parcels would exceed the 20 percent lot coverage.

The Applicant is requesting a waiver of this local law from the Office of Renewable Energy Siting (ORES) as it is unreasonably burdensome (Exhibit 24, Appendix 24-5).

(1) Preliminary SWPPP and SPDES Permit

The NYSDEC requires coverage under the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) for any:

...construction activities involving soil disturbances of one or more acres; including disturbances of less than one acre that are part of a larger common plan of development or sale that will ultimately disturb one or more acres of land; excluding routine maintenance activity that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility.

This authorization is subject to review by NYSDEC but is coordinated with the 94-c process. The Applicant will seek coverage under the NYSDEC SPDES General Permit for the construction phase of the Facility.

The Applicant has prepared a preliminary SWPPP in accordance with the guidelines set forth in GP-0-20-001 and has included it as Revised Appendix 13-3 herein. The preliminary SWPPP describes in specific terms the erosion and sediment control practices that will be implemented during construction activities and the stormwater management practices that will be used to reduce the pollutants in stormwater discharges after Facility construction has been completed. As part of these requirements, an Environmental Monitor (EM) is required to be onsite daily during construction to inspect the Facility's erosion and sediment control practices when soil-disturbing activities are being performed.

The preliminary SWPPP provided in Revised Appendix 13-3 has been prepared as required for coverage under GP-0-20-001. It is anticipated that an electronic Notice of Intent (eNOI) will be prepared and submitted to the NYSDEC (with a copy filed with ORES), who will review and authorize a SPDES General Permit number along with the NYSDEC Letter of Acknowledgement

certifying that the Facility will comply the technical requirements of GP-0-20-001 prior to construction. The Applicant will request a five-acre waiver to disturb greater than five acres at one time during construction. Once the Facility receives the required authorization, the Letter of Acknowledgement will be inserted within the SWPPP and kept onsite during construction, as required by GP-0-20-001. The eNOI will be included in Attachment A of the SWPPP.

(2) Preliminary Post-Construction Stormwater Management Practices Plan

The preliminary SWPPP provides information on stormwater management practices, including erosion and sediment control (temporary and permanent vegetative and structural measures), construction phasing and disturbance limits, waste management and spill prevention, and site inspection and maintenance. Pre- and post-development hydrology, in addition to the evaluation of runoff and drainage patterns, will be analyzed as part of stormwater design in accordance with final Facility layout, and if necessary, the SWPPP will be updated.

13(d) Chemical and Petroleum Bulk Storage

(1) Spill Prevention and Control Measures

As mentioned in Section 13(a)(3) above, the Applicant will prepare a SPCC plan that will be submitted as a compliance filing prior to construction of the Facility. The SPCC Plan will be prepared in accordance with the United States Environmental Protection Agency (USEPA) regulations that outlines preventative measures and response procedures in the unlikely event of unintended releases of petroleum and other hazardous chemicals. Specifically, the SPCC will contain descriptions of onsite oil storage activities, procedures for handling oil, discharge or drainage controls, procedures in the event of a discharge discovery, a discharge response procedure, a list of spill response equipment to be maintained onsite, methods of disposal of contaminated materials in the event of a discharge, and spill reporting information. In addition to temporary fuel during construction and oil at the substation, very limited quantities of other chemicals may be stored onsite and will be discussed in the SPCC Plan.

Aboveground storage tanks (ASTs) will be located within the Facility for equipment and vehicle refueling. Storage tanks will be located at least 300 feet from wetlands, streams, and waterbodies. All equipment refueling and maintenance will be conducted safely at least 100 feet from wetlands, streams, and waterbodies. At the Facility, spill containment is included at the substation and

inverter transformers via secondary containment. Transformers are exempt from the New York State petroleum bulk storage program per 6 NYCRR Part 613-1.3(v)(3)(i).

To minimize the potential impact to aquatic resources from minor leaks or mechanical failures of construction equipment/vehicles, the Facility will adhere to a SPCC Plan that will be finalized prior to the start of construction. The SPCC will be updated once construction is completed, and operations commence.

The SPCC plan dictates that all contractors will be required to keep materials on hand to control and contain a petroleum and chemical spill. In accordance with Section 900-6.4(m)(5), spill kits will be kept in construction vehicles and equipment. Leaks will be stopped and cleaned up immediately. Spillage of fuels, waste oils, other petroleum products, or hazardous materials shall be reported to the NYSDEC's Spill Hotline within two hours, in accordance with the NYSDEC Spill Reporting and Initial Notification Requirements Technical Field Guidance. According to NYSDEC guidance, all spills must be reported unless they meet all of the following requirements:

- The spill is known to be less than 5 gallons; and
- The spill is contained and under the control of the spiller; and
- The spill has not and will not reach the State's water or any land; and
- The spill is cleaned up within 2 hours of discovery.

ORES and the New York State Department of Public Service (NYSDPS) shall also be notified of all reportable spills in a timely manner. Contractors will be responsible for ensuring responsible action on the part of construction personnel.

(2) Storage or Disposal of Regulated Substances

ASTs will be located within the Facility Site during the construction phase. These ASTs will be located no less than 300 feet from wetland, waterbody, and stream features. Onsite disposal of fuel or chemicals will not occur.

(3) Storage of Hazardous Substances Compliance with Local Law Storage Regulations

Onsite storage of large volumes of substances regulated under the chemical and petroleum bulk storage programs of any local laws will occur within the Facility during construction using ASTs, as discussed in Sections 13(d)(1) and (2) above.

13(e) Aquatic Species and Invasive Species

(1) Biological Aquatic Resource Impacts

It is assumed that any potential impacts to surface waters within the Facility Site could potentially impact ecologies, organisms, and ecosystems dependent upon these aquatic resources through the introduction of invasive species. Due to careful Facility siting design, there are no anticipated impacts to State-jurisdictional stream features. Therefore, there are no anticipated adverse impacts to the biological complexes within the Facility Site associated with State-jurisdictional waters identified in the JD provided by ORES. Exhibit 14 directly addresses potential impacts to wetlands and waterbodies within the Facility Site. Additionally, Exhibit 11 (Terrestrial Ecology), Exhibit 12 (NYS Threatened and Endangered Species), and the Wildlife Site Characterization Report (WSCR) (Appendix 12-1) discuss NYS threatened and endangered species that may be impacted by the Facility.

TRC, on behalf of the Applicant, consulted local, state, and federal desktop databases and environmental agencies to determine common species documented to occur in the region of the Facility Site. A list of animal species likely to occur on the Facility Site within each vegetative community is included in Exhibit 11 Terrestrial Ecology as Appendix 11-2 (Mill Point Solar I Wildlife Inventory Table). Appendix 11-2 was completed based on publicly available data sources and observations made during field surveys and site visits. None of the invasive species within the Common Aquatic Invasive Species of New York list (NYSDEC n.d.) were documented during onsite survey work conducted by environmental field staff. Therefore, adverse impacts to aquatic biology resulting from the spread of invasive species caused by Facility construction are not anticipated.

(2) Avoidance, Minimization, or Mitigation Measures for Biological Aquatic Resources

The Facility has been designed to avoid impacts to State-jurisdictional aquatic resources through careful siting of Facility components and utilizing 50-foot buffers around State-jurisdictional streams. As stated above, there will be no impacts to two of the State protected streams as they

are outside of the Facility Site LOD. Auries Creek, a State-jurisdictional stream within the Facility Site LOD will not be impacted due to the use of HDD boring techniques for underground collection line installation under the stream, avoiding impacts. As described herein, the Applicant will adhere to the SWPPP, SPCC Plan, and BMPs, as well as the USCs under Section 94-c. Based on the careful siting of Facility components and avoidance and minimization of impacts, no permanent impacts on State-regulated aquatic biological resources are anticipated.

Facility construction will result in a total of 73.6224 linear feet of impacts to USACE-jurisdictional stream channels. These impacts are anticipated to be permitted under the USACE Nationwide Permit (NWP) program through the Joint Permit Application Process. Any required mitigation measures will be commensurate with Facility construction.

In summation, protection of surface waters during Facility construction through avoidance and implementation of the SWPPP, SPCC Plan, and BMPs protect the biological aquatic resources that depend on these surface waters. No impacts to State-jurisdictional waterways within the Facility Site are anticipated.

13(f) Water Quality Certification

(1) Water Quality Certification Request

In accordance with Section 401 of the Clean Water Act (CWA), if construction or operation of a proposed major renewable energy facility would result in any discharge into a navigable WOTUS and require a federal license or permit, the Applicant shall request and, prior to commencing construction, obtain a Water Quality Certification (WQC) indicating that the proposed activity will be in compliance with water quality standards, as set forth in 6 NYCRR Section 608.9. The Applicant anticipates applying for a WQC concurrently with the Section 404 permit for the Facility. The Applicant intends to commence the Joint Permit Application Process upon the 94-c Application being deemed complete. Specific information regarding water quality standards and the resources onsite can be found in the Wetland and Stream Delineation Report (Appendix 14-1) of Exhibit 14. The Applicant expects that the construction and operation of this Facility shall comply with the New York State Water Quality Standards, as described in 6 NYCRR Section 608.9, pursuant to compliance with Section 401 of the CWA.

(2) *Related Federal Permit Applications*

The Applicant will apply for the Section 401 WQC in accordance with Section 900-1.4, through the Joint Permit Application Process upon the 94-c Application being deemed complete.

As stated above, the Applicant anticipates the need for a coverage under Section 401 of the CWA for impacts to WOTUS related to the Facility. Due to the limited impacts to federally regulated WOTUS, the Applicant anticipates applying for coverage under the USACE Nationwide Permit (NWP) Program. Additional information regarding these anticipated submittals can be found in Exhibit 25 (Other Permits and Approvals). The Applicant initiated the Preliminary Jurisdictional Determination (PJD) and Approved Jurisdictional Determination (AJD) process with the USACE in January and May of 2023. The Applicant intends to update the AJD/PJD request based on the most recent regulations governing WOTUS.

(3) *Compliance with 6 NYCRR Section 608.9*

As stated above, the Applicant is seeking a WQC pursuant to 6 NYCRR Section 608.9 concurrently with this filing. The Applicant does not anticipate the Facility will impact water quality.

(4) *Pertinent Contact Information Related to Water Quality Certification*

The USACE federal wetlands process for the Facility is described above in Section 13(f)(2). The Application will be filed with the New York District of the USACE located at 26 Federal Plaza, New York, New York, 10278-0090.

(5) *Plan and Timetable for Water Quality Certification Request*

Please see Section 13(f)(1) above. The Applicant expects the Facility to be in compliance with state water quality standards.

13(g) References

New York State Department of Environmental Conservation (NYSDEC). (n.d.) Aquifers in New York State. Available at: <https://dec.ny.gov/nature/waterbodies/groundwater/aquifers>. Accessed November 2023.

NYSDEC. 1990. Division of Water Technical & Operational Guidance Series 2.1.3. Primary and Principal Aquifer Determinations. https://www.dec.ny.gov/docs/water_pdf/togs213.pdf. Accessed April 2023.

NYSDEC. 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. Division of Water, Bureau of Water Management, Albany, NY. Available at: https://www.dec.ny.gov/docs/water_pdf/togs111.pdf Accessed September 2023.

NYSDEC. 2022. Well Data Search. Available at: <https://www.dec.ny.gov/cfm/xtapps/GasOil/search/wells/index.cfm?api=31057210320000>. Accessed May 2023.

NYSDEC. 2023. DECinfo Locator. Available at: <https://gisservices.dec.ny.gov/gis/dil/>. Accessed April 2023.

Town of Glen (2022). Solar Energy Facilities Law of the Town of Glen. Available at: https://www.co.montgomery.ny.us/web/municipal/glen/documents/FinalAdoptedSolarLaw-5_2022.pdf. Accessed August 2023.

TRC. 2021. Mill Point Solar Project Geotechnical Engineering Report.

United States Environmental Protection Agency (USEPA). (n.d.). Sole Source Aquifers. Available at: <https://www.epa.gov/dwssa>. Accessed April 2023.

U.S. Fish and Wildlife Service (USFWS). 2023. National Wetlands Inventory (NWI) Wetlands Mapper. Available at: <https://www.fws.gov/wetlands/data/mapper.html>. Accessed May 2023.

United States Geological Survey (USGS). 2003. Principal Aquifers of the United States. Available at: <https://water.usgs.gov/ogw/aquifer/map.html>. Accessed November 2023.