Highest standards

BROOKSIDE SOLAR, LLC

Matter No. 21-00917

Towns of Chateaugay and Burke, Franklin County, NY

Appendix 15-3

Agricultural Plan

February 2022

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Attachment

1.0 Introduction

The Brookside Solar Project ("Facility") will comply with the New York State Department of Agriculture and Markets (NYSAGM) Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands requirements, dated October 18, 2019 ("NYSAGM Guidelines"), and other applicable NYSAGM guidance documents that are in effect during construction.

Brookside Solar, LLC will hire an Environmental Monitor (EM) to oversee construction and restoration work on agricultural land. The EM will coordinate with the NYSAGM Division of Land and Water Resources as necessary to ensure the NYSAGM Guidelines are being met to the maximum extent practicable. The EM will contact the NYSAGM Division of Land and Water Resources if a farm resource concern, management matter pertinent to the agricultural operation, and/or site-specific implementation conditions, cannot be resolved.

Brookside Solar, LLC will comply, to the maximum extent practicable, with the guideline requirements for construction, restoration, monitoring and remediation, and decommissioning as detailed below.

2.0 Facility Description

The Facility is a solar energy generation facility located in the Towns of Burke and Chateaugay in Franklin County, New York. The Facility Site totals 1,471 acres of land that is leased from private landowners. However, the total acreage that will be used for Facility components is limited to 215 acres and the Facility's proposed Limit of Disturbance (LOD) consists of approximately 645 acres. The Facility has been sited on 1,187 acres of agricultural land, 126 acres of residential land, and 51 acres of vacant land as defined the New York State Office of Real Property Tax Services (NYSORPTS).

The Facility will have a generating capacity of 100 megawatts (MW) alternating current (AC) with Facility components including solar arrays, haul roads, inverters, fencing, underground collection lines, and electrical interconnection facilities. The Facility will use approximately 246,298 solar modules to achieve the 100-MW AC generating

capacity. The Facility will use a solar module similar to the Jinko Solar Tiger Pro TR 72M 515-535-Watt Mono-facial module. The Facility proposes to install solar modules on a tracker racking system similar to the ArrayTech DuraTrack® HZ v3 system. The maximum height of the solar array panels is anticipated to be 8 feet,11 inches from finished grade, inclusive of the racking system. The 34.5-kilovolt (kV) collection lines within the Facility Site will gather power from the solar arrays and transport it to a new collection substation that will step up the voltage to 115 kV. The collection substation is approximately 2.3 acres in size and will be located adjacent to solar panels in the southcentral portion of the Facility Site. Access to the collection substation will be via a new haul road from County Route 23. Power from the collection substation will be connected to the existing New York State Electric and Gas (NYSEG) Line 911 Willis Road to Chateaugay 115-kV transmission line via a new interconnection line. This interconnection line will consist of two adjacent overhead 115 kV lines spanning 173 and 210 linear feet, within the Facility Site.

Section 3.0 below includes details that the Facility will comply with for construction, post-construction restoration, monitoring and remediation, and decommissioning, to the maximum extent practicable, to reduce impacts to agricultural land.

2.1 Agricultural Land Uses

Figure 15.3.1 depicts mapping of agricultural uses in the Facility Site. This figure has been prepared using data from the United States Department of Agriculture (USDA) National Agricultural Statistics Service and includes agricultural use based on the USDA Cropland Data Layer, as well as field-verified data collected during the 2020 and 2021 growing seasons. Based on these findings, primary agricultural land cover within the Facility Site consists of approximately 540 acres of hay production and 394 acres of corn. Farmers often rotate their crops so acreages may differ from year to year. Portions of the Facility Site outside the fence line, as shown on Figure 15.3.1, will continue to be used for agricultural operations at the landowners' discretion. During the useful life of the Facility (a minimum of 25 years), land within the Facility fence line will be taken out of agricultural production and will be used for solar energy generation. Following

decommissioning at the Facility, land will be restored to its preconstruction condition to the maximum extent practicable and may again be used for agricultural purposes. Further discussion regarding the decommissioning procedures for agricultural land can be found in Section 3.4 below.

2.2 Soils

Approximately 522 acres of disturbance to agricultural land is anticipated to occur within the Facility's proposed LOD. This includes temporary and permanent disturbance and also includes areas outside the fence line. The temporary disturbance will be caused by grading and laydown areas. Of these 522 acres, only 168 acres will comprise permanent soil disturbance. The remaining 355 acres will be restored after construction. Additionally, within the Facility Site, approximately 4.5 acres (0.3 percent) of agricultural soils are classified as New York State Agriculture Land Classification's Mineral Soil Groups (MSGs) 1 through 4. The 4.5 acres of soil within the Facility Site that are classified in MSGs 1 through 4 will not be impacted. Brookside Solar, LLC has made significant efforts to site Facility components to minimize impacts to the maximum extent practicable for existing and future use of agricultural lands within the Facility Site. Agricultural soils in the Facility Site can be seen on Figure 15.3.2.

2.3 Existing Water Management

Existing drain tiles will be identified and located before construction as much as is reasonably possible based primarily on consultation with the landowners. During and after construction operations, any existing drain tiles within the LOD will be checked for damage, and damaged drain tiles will be repaired or replaced as specified in landowner lease agreements. Drain tiles must meet or exceed the American Association of State Highway and Transportation Officials (AASHTO) M-252 specifications. Repair of subsurface drain tiles should be consistent with the NYSAGM's details for "Repair of Severed Tile Line." Brookside Solar, LLC will coordinate with the landowners to continue to monitor drain tiles post-construction to ensure repairs are properly functioning. The Drainage Remediation Plan, provided as Appendix 15-4 of the Section

94-c Application, will be adhered to and will include a detailed description of identification of surface and subsurface drainage features, the likelihood of impacts, as well as anticipated repair methods.

3.0 NYSAGM Guidelines

The NYSAGM Guidelines have been included in Attachment A. Brookside Solar, LLC will comply with the NYSAGM Guidelines to the maximum extent practicable and will contact NYSAGM and the New York State Office of Renewable Energy Siting (ORES) to discuss alternatives where compliance is impracticable. Brookside Solar, LLC will hire an EM familiar with agricultural practices to oversee construction and restoration work on agricultural land. The EM will coordinate with the NYSAGM Division of Land and Water Resources as necessary to ensure the NYSAGM Guidelines are being met to the maximum extent practicable. The EM will contact the NYSAGM Division of Land and Water Resources if a farm resource concern, management matter pertinent to the agricultural operation, and/or a site-specific implementation condition cannot be resolved. Brookside Solar, LLC intends to comply with the NYSAGM Guidelines for construction, restoration, monitoring and remediation, and decommissioning. Some of the guidelines are detailed below.

3.1 Construction

The measures described below will be followed for the construction of the Facility to comply, to the maximum extent practicable, with the NYSAGM Guidelines, and are detailed as follows.

- Before any topsoil is stripped, representative soil samples will be obtained from the areas to be disturbed. The soil sampling will be consistent with Cornell University's soil testing guidelines, and samples should be submitted to a laboratory for testing pH, percent organic material, cation exchange capacity, phosphorus/phosphate (P), potassium/potash (K), and nitrogen (N). The results are to establish a benchmark that the soil's pH, P, K, and N are to be measured again upon restoration. Should soil sampling not be performed, Brookside Solar,

LLC will obtain fertilizer and lime application recommendations for disturbed areas at: https://agriculture.ny.gov/system/files/documents/2019/10/fertilizer_lime_and_seeding_recommendations.pdf.

- Stripped topsoil will be stockpiled from work areas (e.g., parking areas, electric conductor trenches, along haul roads, equipment pads) and kept separate from other excavated material (rock and/or sub-soil) until the completion of the Facility for final restoration. For proper topsoil segregation, at least 25 feet of additional temporary workspace (ATWS) will be provided along “open-cut” underground utility trenches. All topsoil will be stockpiled as close as is reasonably practical to the area where stripped/removed and will be used for restoration on that particular area. Any topsoil removed from permanently converted agricultural areas (e.g., permanent roads, etc.) will be temporarily stockpiled and eventually spread evenly in adjacent agricultural areas within the Facility’s LOD; however, not to significantly alter the hydrology of the area. Topsoil stockpile areas and topsoil disposal areas will be clearly designated in the field and on construction drawings; changes or additions to the designated stockpile areas may be needed based on field conditions in consultation with the EM. Sufficient LOD area (as designated on the site plan or by the EM) will be allotted to allow adequate access to the stockpile for topsoil replacement during restoration.
    - Topsoil stockpiles on agricultural areas left in place prior to October 31 will be seeded with Aroostook winter rye or equivalent at an application rate of three bushels (168 pounds) per acre and mulched with straw mulch at rate of 2 to 3 bales per 1,000 square feet.
    - Topsoil stockpiles left in place between October 31 and May 31 will be mulched with straw at a rate of 2 to 3 bales per 1,000 square feet to prevent soil loss.
- The surface of haul roads located outside the Facility’s security fence and constructed through agricultural fields will be level with the adjacent field surface.

If a level road design is not feasible, all haul roads should be constructed to allow a farm crossing (for specific equipment and livestock) and to restore/maintain original surface drainage patterns.

- Culverts and waterbars will be installed to maintain the natural drainage patterns.
- Vehicles or equipment will not be allowed outside the planned LOD without the EM seeking prior approval from the landowners (and/or agricultural producer), and associated permit amendments as necessary. All vehicle and equipment traffic, parking, and material storage will be limited to the haul road and/or designated work areas, such as laydown areas, with exception of the use of low ground pressure equipment. Where repeated temporary access is necessary across portions of agricultural areas outside the security fence, preparation for such access will consist of either stripping/stockpiling all topsoil linearly along the haul road, or the use of timber matting.
- Proposed permanent access will be established as soon as possible by removing topsoil according to the depth of topsoil as directed by the EM. Any extra topsoil removed from permanently converted areas (e.g., permanent roads, equipment pads, etc.) will be temporarily stockpiled and eventually spread evenly in adjacent agricultural areas within the Facility's LOD. This will be completed in such a way to not significantly alter the hydrology of the area.
- For open-cut trenching, topsoil will be stripped from the work area adjacent to the trench (including segregated stockpile areas and equipment access). Trencher or road saw-like equipment will not be allowed for trench excavation in agricultural areas, as the equipment does not segregate topsoil from subsoil. Horizontal directional drilling (HDD) installations, primarily designed to avoid impacts to wetlands and an existing pipeline, will also help to minimize agricultural ground disturbances. Any HDD drilling fluid inadvertently discharged will be removed from agricultural areas. Narrow, open trenches less than 25 feet long involving a single directly buried conductor or conduit (as required) to connect short rows within the array, will be considered exempt from topsoil segregation.

- Electric collection, communication, and transmission lines installed above ground can create long-term interference with mechanized farming on agricultural land. Thus, interconnect conductors outside the security fence are proposed to be buried in agricultural fields wherever practicable. Where overhead utility lines are required, (e.g., from the switchyard to the point of interconnection [POI]), installation will be located outside field boundaries or along permanent haul road(s) wherever possible. Should overhead utilities cross farmland, agricultural impacts will be minimized by using taller structures that provide longer spanning distances and locate poles on field edges to the greatest extent practicable.
- The buried utilities located within the Facility's security fence will have a minimum depth of 18 inches of cover if buried in a conduit or a minimum depth of 24 inches of cover if directly buried (e.g., not routed in conduit). The following requirements will apply to all buried utilities located outside the generation facility security fence:
    - In cropland, hayland, and improved pasture, buried electric conductors will have a minimum depth of 48 inches of cover. In areas where the depth of soil over bedrock is less than 48 inches, the electric conductors will be buried below the surface of the bedrock if friable/rippable, or as near as possible to the surface of the bedrock.
    - In unimproved grazing areas or on land permanently devoted to pasture, the minimum depth of cover will be 36 inches.
    - Where electrical conductors are buried directly below the Facility's haul road or immediately adjacent (at road edge) to the haul road, the minimum depth of cover will be 24 inches. Conductors will be close enough to the road edge as to be not subject to agricultural cultivation/subsoiling.
- Should buried utilities alter the natural stratification of soil horizons and natural soil drainage patterns, Brookside Solar, LLC will rectify the effects with measures such as subsurface intercept drain lines. Brookside Solar, LLC will consult the Franklin County Soil and Water Conservation District concerning the type of

intercept drain lines to install to prevent surface seeps and the seasonally prolonged saturation of the conductor installation zone and adjacent areas. Brookside Solar, LLC will install and/or repair all drain lines according to Natural Resources Conservation Service (NRCS) conservation practice standards and specifications. Drain tiles will meet or exceed the AASHTO M-252 specifications. Repair of subsurface drains tiles will be consistent with the NYSAGM's details for "Repair of Severed Tile Line" found in the pipeline drawing A- 52.

- In pasture areas, it may be necessary to construct temporary fencing (in addition to the Facility's permanent security fences) around work areas to prevent livestock access to active construction areas and areas undergoing restoration. For areas returning to pasture, temporary fencing will be erected to delay the pasturing of livestock within the restored portion of the LOD until pasture areas are appropriately revegetated. Temporary fencing including the Facility's required temporary access for the associated fence installations will be included within the LOD as well as noted on the construction drawings. Brookside Solar, LLC will be responsible for maintaining the temporary fencing until the EM determines that the vegetation in the restored area is established and able to accommodate grazing. At such time, Brookside Solar, LLC will be responsible for removal of the temporary fences.

3.2 Post-Construction Restoration

Agricultural areas temporarily disturbed during construction will be de-compacted to a depth of 18 inches to a level no more than 250 pounds per square inch when measured with a soil penetrometer. In areas where topsoil was stripped, soil decompaction will be conducted prior to replacing the topsoil. Rocks that are four inches and larger will be removed from the subsoil surface prior to topsoil replacement. The topsoil will be replaced to the original depth and contours where possible.

Rocks that are 4 inches and larger will be removed from the surface of the topsoil. Subsoil decompaction and topsoil replacement will be avoided after October 1. If areas

are restored after October 1, provisions will be made to restore and reseed eroded and exposed areas in the following spring to establish proper vegetative cover.

Haul roads will be re-graded as needed to allow farm equipment crossing and to restore the original drainage patterns or incorporate the newly designed drainage pattern. Existing drain tiles will be identified and located before construction as much as is reasonably possible based primarily on consultation with the landowners. During and after construction operations, any existing drain tiles within the LOD will be checked for damage, and damaged drain tiles will be repaired or replaced consistent with the NYSAGM's details for "Repair of Severed Tile Line" to the maximum extent practicable. Brookside Solar, LLC will coordinate with the landowners to continue to monitor drain tiles post-construction to ensure repairs are properly functioning.

Restored agricultural areas will be seeded as specified by the landowners to maintain consistency with the surrounding areas. Restoration practices will be postponed until favorable soil conditions exist. Restoration will not occur when soils are in a wet or plastic state of consistency. Regrading stockpiled topsoil and de-compacting subsoils will not occur until the plasticity, as determined by the Atterberg field test, is adequately reduced. Restoration activities will not occur on agricultural fields between October 1 and May 1 unless favorable soil conditions exist.

Construction debris will be removed from the Facility following restoration efforts and disposed in a licensed facility.

3.3 Monitoring and Remediation

Brookside Solar, LLC will provide monitoring and remediation for a period no less than 365 days following the date upon which the solar arrays are in commercial operation. The monitoring and remediation will identify remaining agricultural impacts associated with construction that need mitigation and follow-up restoration.

The EM will assess the topsoil thickness, relative content of rock and large stones, trench settling, crop production, drainage, and repair/replacement of severed

subsurface drain line, fences, etc. If necessary, topsoil will be imported to repair trench settling and topsoil deficiency issues. The EM will conduct visual inspections to determine the presence of excessive amounts of rock and oversized stone material. Excess rocks and large stones will be removed as appropriate.

Should the subsequent crop productivity within affected areas fall to less than half that of adjacent unaffected agricultural land, Brookside Solar, LLC, and other associated parties must determine the appropriate rehabilitation measures to be implemented.

3.4 Decommissioning

The Facility will be decommissioned following the useful life of the solar array. The Decommissioning Plan, provided as Appendix 23-1 of the Section 94-c Application, will be adhered to and will include a detailed description of the decommissioning procedures, site restoration procedures, and a timeframe for decommissioning activities. When the solar arrays are decommissioned, all aboveground structures will be removed from the area. Concrete piers, footer, and other supports will be removed to a depth of 48 inches below the soil surface, and underground electrical lines will be abandoned in place. Following decommissioning at the Facility, land will be restored to its preconstruction condition to the extent practicable and may again be used for agricultural purposes. Previous agricultural lands will be restored with recommendations from the landowners, the Soil and Water Conservation District, and the NYSAGM. Haul roads and landscaping in agricultural areas will be removed unless specified otherwise by the landowners.

FIGURES

ATTACHMENT A

New York State Department of Agriculture and Markets Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Land (Revised 10/18/2019)