Second Supplement to the Application for a Permit Pursuant to § 94-c of the New York State Executive Law for Construction of a Major Solar Electrical Generating Facility

Riverside Solar Project

Towns of Lyme and Brownville, Jefferson County, New York

Matter No. 21-00752

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Attachments

Attachment A. Revised Figure 14-1

Attachment B. Revised Exhibit 15

Attachment C. New Figure 15-4

Attachment D. Decommissioning Cost Estimate (Redacted)



In response to the Notice of Incomplete Application Letter received April 25, 2022 from the Executive Director of the New York State Board Office of Renewable Energy Siting (ORES) regarding the Application submitted by Riverside Solar, LLC (Applicant) pursuant to § 94-c of the New York State Executive Law for Construction of a Major Solar Electrical Generating Facility for the Riverside Solar Project (the Project), supplemental information is provided below and attached. The organization of this document (hereafter referred to as the "Supplement to the Application") is consistent with the April 25, 2022 letter and presents each comment followed by the Applicant's response to the comment.

Exhibit 11 – Terrestrial Ecology

1. Table 11-2 indicates that there will be 59.76 acres of "forested land clearing," however, the "tree clearing" shapefile provided February 23, 2022, indicates there will be 127.41 acres of clearing. In addition, the shapefile includes 14.4 acres of "selective tree clearing" which is not addressed in Exhibit 11. Please review and update the tree clearing impact calculations and/or address any necessary revisions to the shapefiles to ensure consistency between the exhibit narrative and associated GIS data.

Response: The acreages represented in Table 11-2 are correct. TRC has updated the name of the shapefile "Tree_Clearing.shp" to "Vegetative_Clearing.shp" which more accurately reflects the impacts. Clearing impacts were calculated by intersecting the landcover with Facility components. In areas where there are multiple "impacts" for instance (e.g., a vegetative clearing impact and the installation of solar panels in the same location), the "impact" was not counted twice. Therefore, adding the total acreage of each impact type in the table would not necessarily sum to the total acreage of the shapefile. A shapefile named

"Riverside_Project_Components_no_overlap_Footprint.shp" was provided as part of the Supplement to the Application on April 20, 2022 that accounts for areas of "overlapping impacts" as described above.

In addition, the landcover assessment in Table 11-2 assessed overall plant community character, whereas the clearing shapefiles are representative of "vegetative clearing" (not specifically "tree clearing"). The shapefiles, therefore, may include areas where a vegetative community may be generally characterized as shrubland, but clearing and grubbing will be necessary and the area will therefore be "cleared;" however, it will not require "forested"



clearing. Specifically, the shapefile titled "Tree_Clearing.shp" provided as part of the Supplement to the Application, includes tree clearing and other vegetative clearing. To clarify, the Applicant has updated the naming of shapefile "Tree_Clearing.shp" to "Vegetative Clearing.shp" to indicate that this includes clearing in other covertypes.

The Applicant has also included a "Selective_Vegetative_Clearing.shp" shapefile to indicate the areas where vegetative will be removed but the ground will not be disturbed. Design changes were made to the Applicant's earlier siting in order to reduce impacts of tree clearing by modifying 14.4 acres of high impact areas to "selective tree clearing" (i.e., no grading or grubbing of stumps) which as indicated in Table 1 of 19 NYCRR §900-2.15 is determined to be allowable and is therefore not included in the calculations represented in Table 11-2.

Exhibit 14 – Wetlands

 Please supplement Exhibit 14 with discussion of project-specific, site-specific measures and considerations demonstrating how the Applicant has avoided or minimized impacts to the Adjacent Area of Wetland W-BF-5 to the maximum extent practicable, with reference to Figure 14-1.

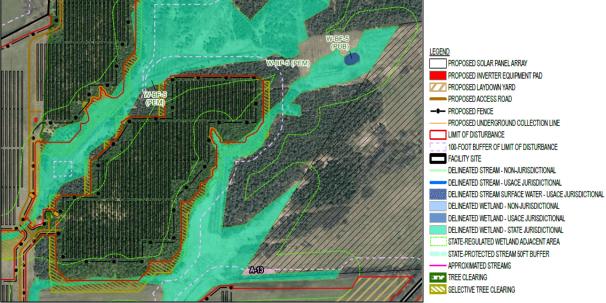
Response: As described throughout the Application, the Applicant considered both environmental and engineering constraints when siting Facility components and has worked within such limitations while still developing a Facility that can meet its capacity goals. The Applicant focused on avoidance of environmental constraints (e.g., wetlands and streams, etc.) while working within the parameters of design limitations (e.g., string length, block size, shading, topography, safety, etc.). Specific details regarding siting considerations made through development of the layout as presented in the Application, including relevant references to Figure 14-1, are described in the subsections below.

Solar Array Panel Blocks

Impacts related to solar arrays within the 100-foot adjacent area of wetland W-BF-5 are primarily square edges of the panel blocks which extend into the wetland adjacent area. As shown in the cutout below from page 06 of Figure 14-1, areas of square edge panel blocks cross into the green dashed line (adjacent area of W-BF-5). Early iterations of the design included panel blocks extending up to the wetland boundary; however, the Applicant pulled back



the strings to the maximum extent practicable to avoid the majority of the adjacent area while still allowing for the upland area to be feasible for placement of components.



Portion of Figure 14-1, page 6

If the Applicant were to further "cut back" the panel blocks in these locations, it would render areas of the Facility Site unusable. For example, for the PV array block that is surrounded by the W-BF-5 wetland in the center of this image alone, the result would be a loss of at least 61 PV strings. This PV string reduction would result in a loss of the inverter and therefore the entire PV block's worth of strings, which would reduce the overall Facility capacity by 4 MWdc. The Applicant has made a concerted effort to avoid wetland features such as W-BF-5 and its adjacent area while still designing a project that meets the energy generation capacity goals. A clear demonstration is the upland area to the east of delineated wetland W-BF-5. This upland area is large enough to support array components and generate power, however the necessary encumbrance of the wetland adjacent area, as well as necessary forest clearing, was not considered in line with the siting goals of the Facility. This area outside of the fence line and under site control by the Applicant will remain forested to the maximum extent practicable.

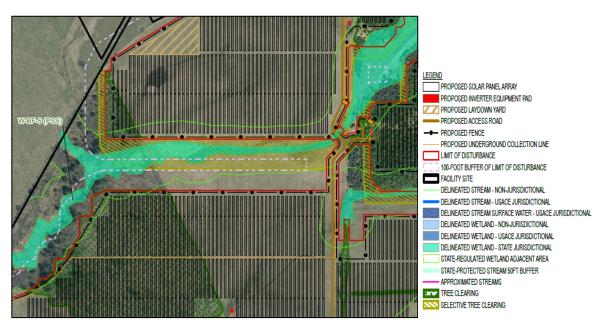


Tree Clearing

As shown above (portion of Page 6 of Figure 14-1), significant portions of forested wetland and wetland W-BF-5's adjacent area were able to be avoided and remain unimpacted. The Applicant's early siting proposed tree clearing in the adjacent area of wetland W-BF-5; however, this was modified to selective tree clearing (i.e., no grading or grubbing of stumps) to avoid ground disturbance and limit impacts while still allowing for shading effects to be minimized. Full tree clearing within the adjacent area of wetland W-BF-5 was therefore reduced by 8.11 acres from prior design iterations.

Wetland Crossing

As shown in Figure 14-1 and below (portion of Page 6 of Figure 14-1), the Facility requires one wetland crossing (and associated adjacent area impacts) to access an upland, previously disturbed portion of the Facility Site for placement of panels. The wetland crossing is located at the narrowest point of the wetland to minimize direct impacts to the wetland itself. The adjacent area impacted in this area consists primarily of previously disturbed agricultural areas which provide limited functionality and protection to the wetland complex itself. Restoration measures and seeding in this area will increase the ability of the adjacent area to function as an upland buffer for the wetland and have a net benefit effect.

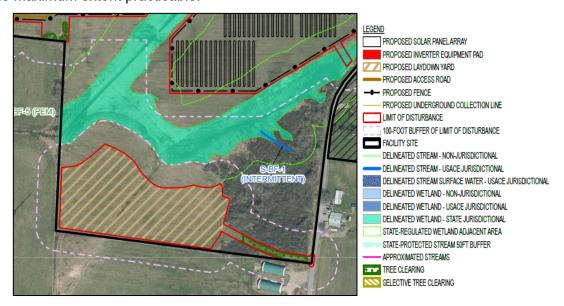


Portion of Figure 14-1, page 6



Laydown Yards

As shown below, (portion of Page 6 of Figure 14-1) the laydown yard proposed south of wetland W-BF-5 has been adjusted and reduced to fully avoid the adjacent area. Although this impact would only be temporary in nature, the Applicant worked diligently to pull back both permanent placement of Facility components and temporary disturbance from the adjacent area of W-BF-5 to the maximum extent practicable.



Portion of Figure 14-1, page 6

Previously Disturbed Land

Most adjacent area impacts will occur in previously disturbed agricultural fields with reduced functions and values (Figure 14-1; Attachment A). The historical agricultural use has limited the functions and values of the wetlands and adjacent areas through the use of herbicides, monocultural crop plantings, plowing, and harvesting. Native and naturalized seed mixes used will increase wildlife habitat and only be subject to management (mowing) once or twice per year. This will also improve the ecological richness and vegetative cover density leading to an increase in the various functions and values associated with impacted State-regulated adjacent areas.

Classification of Impacts

Following the siting measures described above, the Applicant also ensured that the impacts proposed as unavoidable in the adjacent area of wetland W-BF-5 were occurring in areas where



the impacts are allowable. In accordance with 19 NYCRR §900-2.15(g), the proposed Facility components sited within State-regulated adjacent areas are considered "Allowable" activities, as wetland W-BF-5 is a "Class III, IV, or Unmapped > 12.4 acres" wetland. Permanent impacts to the Adjacent Area of W-BF-5 are limited to the following:

- Access road (0.72 acre) crossing the narrowest portion of W-BF-5 and riprap stabilization (0.02 acre);
- Solar arrays (2 acres) and inverters (less than 0.01 acre);
- Grading (0.13 acre); and
- Fencing (0.29 acre).

Temporary impacts to the Adjacent Area of W-BF-5 include:

- Tree clearing (12.44 acres);
- Horizontal directional drill boring locations (two crossings; less than 0.01 acre); and
- Laydown yards (less than 0.01 acre).

As stated throughout Exhibit 14 and provided herein and as shown on updated Figure 14-1 (Attachment A), the Applicant has minimized impacts to the adjacent area of wetland W-BF-5 to the maximum extent practicable, each of the impacts are "Allowable" per the Section 94-c Regulations, and the remaining impacts are the minimum necessary while still maintaining the viability of the Facility.

Exhibit 15 – Agricultural Resources

- 1. The Office lacks sufficient information to make a determination on whether areas inside or outside of the proposed fence line and/or Limits of Disturbance (LOD) are suitable for agricultural co-utilization, which can be an acceptable form of mitigation for potential significant adverse impacts to agricultural resources. Please supplement the discussion at Exhibit 15, section 15(e), to provide additional details concerning the feasibility of implementing agricultural co-utilization at the Facility Site. The assessment should, at a minimum, include:
 - A map and acreage figure to demonstrate the available acreage under the Applicant's control that would be suitable for co-utilization operations with a focus on traditional row crops and hay, sheep or other grazing, the cultivation of



- pollinator-friendly plantings, the installation of apiaries, livestock or livestock products;
- b. A discussion of existing constraints (i.e., landowner-imposed development restrictions, state protected streams, jurisdictional wetlands, local and 94-c setbacks; existing land use, known T&E mitigation parcels, etc.); and
- c. Availability (or anticipated availability) of third-party operators to install, operate and maintain potential agricultural operations.

Response: The Applicant seeks to clarify the available acreage under control for the Facility and potential agricultural co-utilization. The Facility Site, as presented in the Application, consists of 1,168 acres for which the Applicant has the option to lease or purchase. Land agreements for the Facility consist of two stages – construction and operation. Following construction of the Facility, the Applicant will only have control over areas where Facility components are located, and land needed for operation and maintenance (O&M). Lease or purchase options will not be exercised on land beyond that needed for the Facility and O&M. Therefore, the Applicant has identified approximately 530 acres of land for potential agricultural co-utilization, as shown on Figure 15-4.

Approximately 638 acres of the current "Facility Site" will not be under the Applicant's control following construction of the Facility and will therefore not be considered for agricultural coutilization. Continued agricultural use on those portions of the parcels for which lease options or purchase agreements are not exercised is at the discretion of the landowner.

The Applicant has included a new Figure 15-4 which identifies areas which may be suitable for agricultural co-utilization (i.e., planting of pollinator species and/or placement of apiaries). As shown on Figure 15-4, the Applicant has not included areas of known constraints in the calculation of available land for agricultural co-utilization. This includes portions of parcels designated as "landowner-imposed development restriction" areas as well as State-protected wetlands and waterbodies and associated adjacent areas/buffers. There are no existing land use restrictions in the areas designated as available for agricultural co-utilization, and the parcel being considered for threatened and endangered (T&E) species mitigation is not included. The planting of pollinator species and placement of apiaries are not subject to setback requirements.



The Applicant maintains awareness for opportunities where solar and agricultural activities may coexist at large scale projects and will consider an Agricultural Co-Utilization Plan. If such coutilization activities are feasible for the Facility, once the extent of agricultural mitigation is known and details regarding specific conversations with landowners and agricultural providers is finalized, the Applicant will prepare an Agricultural Co-Utilization Implementation Plan before the commencement of construction of any agriculture integration facility or commencement of agriculture co-utilization activities. As noted above, the Applicant anticipates co-utilization to consist of planting pollinator species and placement of apiaries within the anticipated lease/purchase areas, however the Applicant may consider other co-utilization options as well such as sheep grazing. The Applicant has evaluated land within the parcels where lease or purchase options are expected to be exercised and will continue conversations with those landowners to identify feasibility for agricultural co-utilization. There is sufficient acreage within the limits of the final Facility's Anticipated Lease/Purchase Areas (see Figure 15-4) for agricultural co-utilization to occur.

The Applicant is currently in communication with local individuals with the capacity and expertise to provide maintenance services in accordance with a pollinator maintenance plan at the Facility Site. In addition, there is local availability and interest in providing apiaries and partnering with the Applicant as part of beekeeping operations for the Facility. Once the final extent of mitigation is known, the Applicant will work to finalize agreements for such services at the Facility.

Additionally, the Applicant has experience working with third-party maintenance providers in New York and is currently implementing co-utilization at smaller-acreage facilities where such practices were feasible. The Applicant will continue to work with maintenance providers in New York to explore opportunities where co-utilization can be achieved at large scale facilities. Final details regarding maintenance plans and partnerships will be outlined as part of the final Agricultural Co-utilization Plan to be filed as a compliance filing.



In light of the above, the Applicant would consider a site-specific condition as follows:

- (1) Agricultural Co-Utilization Plan Consistent with 19 NYCRR §§ 900-2.16(e), 900-6.4(s)(1) and 900-10.2, the Permittee shall submit an Agricultural Co-Utilization Plan for the life of the Facility establishing a program or pilot program to implement agricultural co-utilization at the final lease/purchase areas to minimize or mitigate potential significant adverse impacts to agricultural resources.
- (i) The Agricultural Co-Utilization Plan shall include the following, without limitation:
 - (a) Evaluation of options for traditional row crops and hay, sheep or other grazing, the cultivation of pollinator-friendly plantings, the installation of apiaries, livestock or livestock products;
 - (b) A demonstration that the proposed agricultural co-utilization will be feasible; and
 - (c) An itemization of the proposed investments made by the applicant to facilitate the agricultural co-utilization (e.g., grazing plan, planting pasture species, development of watering facilities, modified access for livestock trailers, panel spacing, additional fencing, access roads, gates, housing, etc.).
- (2) Consistent with 19 NYCRR §§ 900-2.16(e), 900-6.4(s)(1) and 900-10.3, the Permittee shall submit an Agricultural Co-Utilization Implementation Plan (Implementation Plan) before the commencement of construction of any agricultural integration facility or the commencement of agricultural co-utilization activities, including all applicable local permits and approvals. Each Implementation Plan shall include the following:
 - (i) landowner agreements allowing access for authorized co-utilization activities (e.g., sheep farmers/beekeepers);
 - (ii) prescribed plan details for authorized co-utilization activities (e.g., grazing plans);
 - (iii) long-term farming contracts; (iv) site plans depicting operational agricultural coutilization equipment and facility components;



- (v) decommissioning requirements for associated infrastructure (water wells, water lines, fencing, barns, etc.); and
- (vi) compliance with applicable New York State Department of Agriculture and Markets (NYSAGM) regulations and other applicable regulations and guidance.

Exhibit 23 – Site Restoration and Decommissioning

1. Please update the Decommissioning Cost Analysis (Appendix 23-1) to include the additional information concerning salvage value estimates for tracker motors, LV wiring (insulated cable) and chain link fence (steel) at footnotes seven (7) and eight (8), which are referenced in the Table but not set forth at the bottom of each sheet.

Response: Footnotes 7 and 8 were inadvertently cut off at the bottom of each sheet. The table has been updated and the footnotes are visible in Attachment D.

