

**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**

**Brookside Solar Project**  
Towns of Burke and Chateaugay, Franklin County, New York

**Matter No. 21-00917**

Applicant:  
Brookside Solar, LLC  
AES Clean Energy  
195 Montague Street  
14th Floor, Suite 1461  
Brooklyn, New York 11201  
Contact: Eric Will  
brooksidesolar@aes.com  
Office: (886) 757-7697



Prepared by:  
TRC Companies, Inc.  
215 Greenfield Pkwy., Suite 102  
Liverpool, NY, 13088  
Contact: Hayley Effler  
HEffler@trccompanies.com  
Office: (315) 715-1642



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## Attachments

- Attachment A. Revised Exhibit 3. Location of Facilities and Surrounding Land Use
- Attachment B. Revised Figure 3-3. Current Land Use and Major Utility Infrastructure in the Study Area
- Attachment C. Revised Appendix 5-1. Facility Design Drawings
- Attachment D. Revised Appendix 6-2. Site Security Plan
- Attachment E. Bard HVAC Sound Level Data
- Attachment F. Revised Appendix 7-5 and Figure 7-5
- Attachment G. Revised Visual Simulations VP4 and VP7
- Attachment H. Revised Exhibit 9. Cultural Resources
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Attachment L. Revised Exhibit 13. Water Resources and Aquatic Ecology

Attachment M. Revised Figure 13-1. Water Wells, Groundwater Aquifers, and Recharge Areas

Attachment N. Revised GIS Shapefiles

Attachment O. Revised Figure 13-3. Delineated Surface Water

Attachment P. Revised Exhibit 14. Wetlands

Attachment Q. Revised Figure 14-1. Delineated Wetlands

Attachment R. Revised Wetland Delineation Report text and figure, submitted December 2021

Attachment S. Preliminary Jurisdictional Determination

Attachment T. Truck Turning Tracks

Attachment U. Revised Decommissioning Cost Estimate (Confidential)

In response to the Notice of Incomplete Application Letter received April 19, 2022 from the Executive Director of the New York State Office of Renewable Energy Siting (ORES or the Office) regarding the Application submitted by Brookside 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 Brookside Solar Project (the Facility), 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 19, 2022 letter and presents each comment followed by the Applicant’s response to the comment.

### **Exhibit 3 – Location of Facilities and Surrounding Land Use**

1. *19 NYCRR §900-2.4(e) requires “[a] map of any existing overhead and underground major facilities for electric, gas, or telecommunications transmission within the study area and a summary of any consultations with owners of major facilities that may be impacted by the facility (crossing existing utilities or otherwise).” For the following, please supplement the Exhibit to include a summary of any consultations with owners of the facilities, proposed component crossings (if any), a description of how potential cumulative impacts will be avoided, and revise Figure 3-3 to include any updates to the locations of proposed projects in relation to the Facility Site:*

- a. Two Jericho Rise Wind Farm turbines within or adjacent to the Facility Site and four turbines located on parcels adjacent to the Facility Site;*
- b. Portions of the proposed North Country Wind facility within or adjacent to the Facility Site;*
- c. Noble Chateaugay Windpark;*
- d. NexAmp 5 MW solar facility south of US Route 11 off of Ketchum Road;*
- e. Glengarry Solar Project south of US Route 11 on Glengarry Farms property in Burke;*  
*and*
- f. North Country Energy Storage Facility.*

*Additionally, please describe efforts to identify existing gas and/or water lines within the Facility Site and include a description of how impacts to such facilities will be avoided.*

**Response:**

Summary of Consultations with Owners

a. The Jericho Rise Wind Farm is a constructed and operating project. The Applicant is aware of the location of the Jericho Rise Wind Farm and how it relates to the proposed Brookside Solar Project. The closest wind turbines to the Facility Site are Jericho Rise turbines 14, 2, 5, and 27. While turbines 14 and 2 are technically located on a parcel within the Facility Site, no Facility components are proposed on that parcel, and the turbines are not located within the fence line of the final proposed Facility Site. Turbine 14 is 755 feet away from Facility components, and turbine 2 is 770 feet away from Facility components. Turbine 27 is 691 feet southeast of the Facility Site, and the access road to turbine 5 is located 718 feet south of the Facility Site. Based on the Jericho Rise Wind Farm Figure 2: Revised Project Layout, available on the project's website (<https://www.edpr.com/north-america/jericho-rise-wind-farm>), none of the underground collection lines associated with these wind turbines will cross or interfere with Facility components. In addition, the Applicant has consulted with the developer of the Jericho Rise Wind Farm, and the developer has not raised any concerns with the location of the Brookside Facility in relation to the Jericho Rise Wind Farm Facility components. These and other existing wind turbines in the vicinity of the Facility Site are depicted on Attachment B, Revised Figure 3-3.

b. Consultation with the North Country Wind facility has not been conducted as the facility is in the early stages of development and has not yet been built. North Country Wind is proposed to be located in the Towns of Burke and Chateauguay and maps available on the Terra-Gen North Country New York Wind Project website (<https://www.northcountrynywindproject.com/>) depict only one point to represent the approximate location of the entire proposed facility. The location of that point is the extent of public locational information available for the Applicant's review. Therefore, aside from the fact that the North Country Wind facility will be located approximately northeast of the Brookside Facility Site, the Applicant does not have access to proposed locations of the proposed North Country turbines, collection lines, or any other facility components. Regardless, as the North Country Wind facility has not yet been constructed the Brookside Facility will not impact the North Country Wind Farm.

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c. AES is the owner of the Noble Chateaugay Windpark project. Therefore, consultation with the owner of this facility is not applicable, as it is done internally within the company. Construction and operation of the Facility will not impact the Noble Chateaugay Windpark project.

d. Consultation with the NexAmp solar facility has not been conducted as the facility has not yet been built. It is proposed to be located immediately west of the Facility Site, on parcel 59.-4-14.100 on the western side of Ketcham Road. Therefore, there will be no impacts to this proposed project as a result of Brookside Facility construction or operation.

e. AES is the owner of the Glengarry Solar project. Therefore, consultation with the owner of this facility is not applicable, as it is done internally within the company. Construction and operation of the Facility will not impact the Glengarry solar project.

f. Consultation with the North Country Energy Storage Facility has not been conducted as the facility has not yet been built. It is proposed to be located over 1.5 miles south of the proposed Facility. Therefore, there will be no impacts to this proposed project as a result of Brookside Facility construction or operation.

Given that the Facility will only be constructed on leased, buildable area, it will not interfere with the construction or operation of other nearby Projects. There will be no impacts to the above-referenced existing and proposed projects as a result of Brookside Facility construction or operation.

### Revised Figure 3-3

Figure 3-3, Current Land Use and Major Utility Infrastructure in the Study Area, has been revised and is included as Attachment B. It now depicts the locations of the Glengarry Solar Project, the Noble Chateaugay Wind Park, the North Country Energy Storage Facility, the proposed North Country Wind Facility, in addition to the previously depicted Jericho Rise, Noble Chateaugay, and Noble Clinton wind turbines.

### Description of Potential Cumulative Impacts

Cumulative impacts associated with the existing and proposed facilities described above are addressed throughout the Application where required. 19 New York Codes, Rules and Regulations (NYCRR) §900-2.4(e) does not require a cumulative impact analysis.

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Cumulative visual effects are discussed and evaluated within Exhibit 8, where it is noted that specific equipment and alignment details are uncertain at this time for the North Country Wind Project, the 5-megawatt (MW) solar facility by NexAmp Solar, the Glengarry Solar Project, and the 15-MW solar facility by Norbut Solar Farms. The proposed Brookside Solar Project will be installed generally near the existing Noble-Chateaugay Wind Farm and within the existing Jericho Rise Wind Farm. As stated within Exhibit 8 Section (a)(11), due to the geographically condensed nature of these multiple facilities, there would not be repeated encounters of numerous installations over distance. These facilities are either embedded or contiguous to the proposed Brookside Solar Project. Populated areas including the Villages of Chateaugay and Burke as well as Burke Center will not experience cumulative effects from the proposed Facility as seen against the existing nearby wind farms. Overall cumulative effects from the Facility vary but overall, do not appear to be prominent due to the natural low profile of the panels. Landscape screening of the Facility is proposed and will moderate and reduce aspects of the Facility for nearby residences.

Cumulative sound impacts are discussed and evaluated within Exhibit 7. There are no existing solar projects within 3,000 feet of a proposed noise source; therefore, a cumulative noise analysis is not necessary. A discussion of cumulative traffic impacts was added to the revised Exhibit 3, included as Attachment A.

#### Existing Gas and/or Water Lines

The Brookside Solar Project is not anticipated to impact major gas lines or water lines. The Rextag Energy geographic information system (GIS) Data national dataset was reviewed to identify existing gas lines within the Facility Site. Other sources used to generate Figure 3-3, Current Land Use and Major Utility Infrastructure in the Study Area, include the Development Authority of the North Country (DANC) and the Franklin County Office of Real Property Tax Services. The figure includes publicly available information regarding the presences of gas lines, such as the location of the St. Lawrence Gas Line, and the Applicant is not aware of additional gas lines or water lines on Facility parcels or in the area. There are no gas transmission pipelines mapped in Franklin County by the National Pipeline Mapping System public viewer. According to the DANC's Franklin County Internet Mapping Application, there are no major gas lines or water lines that have the potential to be impacted by the Facility. Additionally, the

Applicant completed a full American Land Title Association (ALTA) survey for the Facility Site that indicated the absence of gas and water lines.

2. *19 NYCRR §900-2.4(f) requires “[a] map of all properties where a facility or ancillary feature would be located... and any publicly known proposed land use plans for any of these properties.” Figure 3-4 depicts several landowner-imposed development restriction areas. Please provide a description of the landowner-imposed development restrictions for each parcel or provide cross-references to other exhibits where the requested information can be found.*

**Response:** Within Exhibit 15, Section (b)(3), “Landowner Imposed Development Restrictions” lists the parcel numbers and sections of parcels that will remain as non-buildable land and will not be leased by the Applicant. Per discussions with landowners at the Facility and as depicted on Figures 3-4 and 11-1, landowners have requested (and the Applicant has omitted from the Facility design) non-buildable areas on the following parcel acreage:

- The western half of parcel 59.-4-9
- Approximately 27 acres in the southeastern portion of the 100-acre parcel 73.-3-2
- Approximately 68 acres of the 85-acre parcel 60.-3-3
- Approximately 20 acres of the western portion of parcel 59.-3-2
- Approximately 16.5 acres of the southern portion of parcel 59.-3-3
- Approximately 9 acres of the northern portion of parcel 60.-3-4

It is the Applicant’s understanding that areas proposed as non-buildable will remain unchanged by the Facility from their current intended use, which includes active agricultural land, residential land, industrial land, and forested land. Further detail on specific land use types within each landowner-imposed development restriction area can be seen on Figure 11-1.

3. *19 NYCRR §900-2.4(l) requires “[a] qualitative assessment of the compatibility of the facility, including any off-site staging and storage areas, with existing, proposed and allowed land uses... located within a one (1)-mile radius of the facility site... [demonstrating] that conflicts from facility-generated noise, traffic and visual impacts with current and planned uses have been minimized to the extent practicable.” Please describe specific avoidance and minimization measures and state that construction and operation of the proposed Facility will not prohibit community use and enjoyment of the following resources:*



- a. *NYS-designated fishing rights easements along Chateaugay River;*
- b. *High Falls Park & Campground;*
- c. *NYS Snowmobile Trail C8C; and*
- d. *Military Trail NYS Scenic Byway.*

**Response:** Avoidance and minimization measures employed during construction and operation of the proposed Facility to allow the continued community use and enjoyment of the identified resources have been added to Section 3(l) Compatibility with Land Uses in Exhibit 3, included as Attachment A.

#### **Exhibit 4 – Real Property**

1. *19 NYCRR §900-2.5(a) requires “[a] map of the facility site showing property boundaries with tax map sheet, block and lot numbers; the owner of record of all parcels included in the facility site and for all adjacent properties; easements, grants, deed restrictions, and related encumbrances on the parcels comprising the facility site...” Appendix 4-1 notes the existence of easements, grants, deed restrictions, related encumbrances, etc. that are not shown on the survey. Please provide a description of proposed crossing agreements, easements, and/or other property rights needed to locate the proposed Solar Facility in proximity to the existing Jericho Rise Wind facility (components within or adjacent to facility site), including other ROW crossings, as applicable. Please update Figure 4-1 to include utility corridors within and adjacent to the Facility Site and provide all related GIS data.*

**Response:** As stated within Exhibit 4 of the 94-c Application, “the Applicant has obtained or can obtain all necessary title or leasehold interest in the Facility Site, in the form of Solar Land Purchase Agreements and Land Lease and Solar Easements and will obtain any further rights needed to interconnect with the utility infrastructure through the interconnection agreement.” Necessary easements and grants are discussed further within Exhibit 4. Per §900-10.2(h), these agreements will be presented as appropriate in the Pre-Construction Compliance Filing stage. At that point a map with property lines will be provided along with necessary titles, leasehold interests, or participation agreements including those for access to public roads, potential Facility impacts, and interconnections.

Crossing or easement agreements to be made between Brookside Solar, LLC and the Jericho Rise Wind Facility are not anticipated to be necessary.

### **Exhibit 5 – Design Drawings**

1. *19 NYCRR §900-2.6(d) requires that “[s]olar facilities shall meet the setback requirements set forth in Table 2. Compliance with such setbacks listed in Table 2 shall be shown in the general site plan drawings required by section 19 NYCRR §900- 2.6(f)(1)(i) of this Part...” Please review Design Drawings PVC.01.01, PV-C-01.03 and PV-C.01.17 to confirm that solar arrays comply with applicable local setback requirements.*

**Response:** Sheets PV-C.01.01, PV-C.01.03, and PV-C.01.17 of the design drawings, included in the Revised Appendix 5-1 in Attachment C, have been updated to trim or relocate solar arrays to comply with applicable local setback requirements. The fence line on Sheet PV-C.01.17 was updated as a result of this change.

These updates are reflected in existing conditions & clearing plan sheets (where applicable), the site plan sheets, the grading, drainage, and erosion control plan sheets, and enlarged landscape plan sheets, included in the Revised Appendix 5-1 in Attachment C.

2. *19 NYCRR §900-2.6(f)(1)(i)(b) requires the site plans to include “...temporary road improvements for component deliveries...” Design Drawings PV-C.01.02 and PV-C.01.04 include a note stating, “road improvements by others.” Please describe the activities associated with “road improvement” or provide cross-references to other exhibits where the requested information can be found.*

**Response:** It is the Applicant’s understanding per correspondence with the Town of Chateaugay Superintendent of Highways that for locations where the “road improvements by others” callouts are shown, the Town of Chateaugay and County Highway Department will be making road improvements. These improvements will be made on a dirt road segment between the dead ends of Stuart Road and Martin Road. The road improvements will consist of rebuilding and maintaining the paved municipal road through the section called out and clearing trees necessary to construct the restoration. Additional information has been added in

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Attachment C, the Revised Appendix 5-1, and to the drawing callouts on sheets PV-C.01.02 and PV-C.01.04 to reflect this.

3. *19 NYCRR §900-2.6(f)(1)(i)(c) requires the site plans to include “[e]lectric cable collection line corridors...” Please provide collection line routing details for connecting to the two arrays shown on drawing PV-C.01.02.*

**Response:** The two arrays shown on sheet PV-C.01.02 of Attachment C, the Revised Appendix 5-1, will be connected via DC homeruns. The horizontal directional drilling (HDD) pits for these DC homeruns have been added to sheet PV-C.01.02, the limits of disturbance (LOD) have been updated, and annotation added for clarity. The same updates were applied to two stream crossing locations on sheet PV-C.01.12.

These updates are reflected in existing conditions & clearing plan sheets (where applicable), the site plan sheets, the grading, drainage, and erosion control plan sheets, and enlarged landscape plan sheets, included in the Revised Appendix 5-1 in Attachment C.

4. *19 NYCRR §900-2.6(f)(1)(i)(c) requires that the site plans include “[t]he approximate locations of any proposed splice vaults.” Please update Exhibit 5 to describe splicing methods and proposed splicing structure and provide approximate locations of splice vaults and junction boxes on updated site plans. If splice vaults will not be used, please revise the narrative accordingly.*

**Response:** Typical underground infrastructure/collection system details have been provided, including single and multiple circuit layouts with dimensions of proposed depth, trench width, level of cover, separation requirements between circuits, clearing width limits for construction and operation of the facility, LOD, required permanent right-of-way (ROW) and a description of the cable installation process. Sheets PV-C.12.01 and PV-C.12.02 of Attachment C, Revised Appendix 5-1, include details on the collection system and installation information.

Splicing will be carried out through the use of direct buried splices. Splicing locations will be determined during construction and will occur as needed, based on conductor spool length availability. The preferred splicing method will consist of the use of Cold Shrink splices. At each splicing location there will also be detectable warning tape and a marker ball so the splice can be easily found and identified. For situations in which multiple medium voltage (MV) cables

meet, Sectionalizing Enclosures will be installed instead of splicing. Typical details of any proposed Splices and Sectionalizing Enclosures have been provided, including dimensions, level of cover, and required trench width and depth. They can be found on sheet PV-C.12.03 of Attachment C, Revised Appendix 5-1, Facility Design Drawings.

5. *For consistency across application exhibits, please revise the site plans to include the following General Notes:*
- a. *“Pursuant to 19 NYCRR §900-3(a)(2), if previously unknown oil and/or natural gas wells are confirmed within the Facility Site during construction of the Facility, the contractor shall immediately cease construction activities in the immediate area surrounding the well and shall notify and consult with the Office and NYSDEC Division of Mineral Resources, Regional Minerals Manager, (Central Office, Albany, NY) to determine what, if any, mitigation measures must be implemented.”*
  - b. *“Blasting is prohibited.”*

**Response:** These notes have been added to Sheet PV-G.01.01, included within Attachment C, the Revised Appendix 5-1.

6. *19 NYCRR §900-2.6(f)(1)(j) requires the site plans to include “[a]ny berms, retaining walls, fences and other landscaping improvements...”*
- a. *PV-C.14.01 indicates two seed mixes to be used. Please update Exhibit 5 and the Applicant’s narrative concerning the proposed Planting Plan (Exhibit 8, section 8(d)(8)) to indicate the composition of the proposed seed mix and locations where each mix is proposed to be used.*
  - b. *PV-C.14.02 indicates planting templates where one side is taller and evergreen in nature and one side is more reminiscent of successional fields and mixed agricultural hedgerows. Please revise the detail drawings in Exhibit 5 and the Applicant’s proposed Planting Plan (Exhibit 8, section 8(d)(8)), to indicate the planting template details and orientation of planting templates in relation to the fence (i.e., evergreens adjacent to the fence).*

**Response:**

- a. Sheet PV-C.14.01 has been updated within Attachment C to clarify general locations for potential uses for seed mixes. The solar farm seed mix is intended for the majority of the site,

such as in and around the solar arrays, and elsewhere. The flowering herbaceous native pollinator seed mix is intended to be used at the discretion of the Applicant, and therefore, there are no planned locations or recommended locations for use at this time (locations will be determined based on availability of relevant seed mixes during the pre-construction Compliance Filings). The compositions of these two mixes are tabulated on Sheet PV-C.14.01.

b. Sheet PV-C.14.02 has been updated within Attachment C to show where the fence line is located in relation to planting templates.

7. *19 NYCRR §900-2.6(f)(2)(i) requires “[t]ypical elevation drawings indicating the length, width, height, material of construction, color and finish of all buildings, structures, and fixed equipment...” Please revise Appendix 5-1 to include an elevation view of the proposed 28 ft. x 50 ft. control house at the POI substation (e.g., Sheet 422299-0006-001) and include the required information of 19 NYCRR §900- 2.6(f)(2)(i).*

**Response:** In Attachment C, Revised Appendix 5-1, the section C-C cut arrows have been extended on sheet 422299-0002-001 to capture and show the Point of Interconnection (POI) substation’s control house in the section cut elevation view on sheet 422299-0005-001, along with the requested information.

8. *19 NYCRR §900-2.6(f)(2)(iii) requires “[d]etails of typical underground infrastructure section, including single and multiple circuit layouts with dimensions of proposed depth, trench width, level of cover, separation requirements between circuits... and a description of the cable installation process...”*

- a. *Separation requirements between circuits are not indicated in the drawings. Note 13 of Sheet PV-C.12.01 – Trench, Boring and Crossing Details indicates that "separation will be determined based on the Ampacity calculations during IFC design." Please provide minimum and approximate distances between circuits.*
- b. *Please cross reference the description of the cable installation process provided in Appendix 21-2.*

**Response:**

- a. In Attachment C, the Revised Appendix 5-1, Sheet PV-C.12.01 has been updated to show a minimum of 5’ spacing between phases where note 13 applies.

- b. In Attachment C, the Revised Appendix 5-1, Sheet PV-C.12.01 has been updated to include a note to reference the cable installation details within Appendix 21-2, the Brookside Solar Energy Facility 115 kV Transmission & 34.5 kV Collection Design Criteria.

### **Exhibit 6 – Public Health and Safety**

1. 19 NYCRR §900-2.7(b)(5) requires “[a]description of a cyber security program for the protection of digital computer and communication systems and networks that supports the facility demonstrating compliance with current standards... and providing for periodic validation of compliance with the applicable standard by an independent auditor.” Please provide a revised confidential Site Security Plan which includes: (1) General details of cybersecurity programs that demonstrate compliance with current standards; (2) The time span between periodic audits; (3) Whether the Facility owner, operator, or other entity is responsible for each of tracking, funding, and implementing site upgrades to meet updated standards.

#### **Response:**

1. As a global energy provider, the Applicant has a robust cyber security program that meets rigorous standards. As stated within Attachment D, the revised Site Security Plan, the Applicant implements rigorous standards and guidelines that are aligned with the Global Technology Policy and Information Technology General Controls (ITGC) catalog, that provide the basis for Sarbanes-Oxley compliance, as well as with the National Institute of Standards and Technology (NIST) Framework for Improving Critical Infrastructure Cybersecurity. AES identified the following cyber security controls:

- Identify – Controls that support the identification and prioritization of AES assets, risks, and risk mitigation techniques;
- Protect – Controls that limit or contain the impact of potential cybersecurity events;
- Detect – Controls that support the timely discovery of cybersecurity events; and
- Respond & Recover – Controls that contain the impact of cybersecurity events and facilitate timely recovery to normal operations.

Cybersecurity guidelines that provide AES with a foundation for protection, detection, response, and recovery capabilities include the implementation of network security architecture; internet firewalls, business network firewalls, and control system network firewalls; the maintenance of a network device inventory and a software inventory; employment of malware defenses; assessment of vulnerabilities and patch management; development of an incident response plan; filtering of web content; protecting traffic flooding; and conducting penetration testing. Other cyber security guidelines established by AES include access control, change management and program development, operations management, data flow, remote access, and cybersafety and awareness. Guidelines were developed in conjunction with the following cybersecurity models: the Electrical Subsector Cybersecurity Capability Maturity Model (ES-C2M2); the Cybersecurity Council/SANS 20 Critical Security Controls (CSCs) for Effective Cyber Defense (SANS 20); and technical guidance developed by NIST and the U.S. Department of Homeland Security (DHS) Industrial Control Systems Cyber Emergency Response Team (ICS-CERT).

2. As stated within Attachment D, periodic independent cyber security audits will be conducted annually to validate the Facility's compliance with current standards. Third party providers will be sought out to perform independent reviews of the IT Services on behalf of AES. They will produce an annual independent audit report that will then be reviewed and assessed by AES management on an annual basis, who will then determine if risks are appropriately mitigated.

3. As stated within Attachment D, the Facility owner and operator will be responsible for tracking, funding, and implementing site upgrades to meet updated standards, as necessary.

### **Exhibit 7 – Noise and Vibration**

1. *19 NYCRR §900-2.8(b)(2)(i) requires “[a] maximum noise limit of forty-five (45) dBA Leq (8-hour), at the outside of any existing non-participating residence, and fifty-five (55) dBA Leq (8-hour) at the outside of any existing participating residence.” 19 NYCRR §900-2.8(b)(2)(ii) requires “[a] maximum noise limit of forty (40) dBA Leq (1-hour) at the outside of any existing non-participating residence from the collector substation equipment.” 19 NYCRR §900-2.8(b)(2)(iv) requires “[a] maximum noise limit of fifty-five (55) dBA Leq (8-hour), short-term equivalent continuous average sound level from the facility across any portion of a non-*



*participating property...” Maximum equipment sound power level modeling must include all sources. Please revise the computer noise modeling to include low voltage transformers, tracking motors, the generator, and control house in the site-wide noise modeling. After making these revisions, please reevaluate the overall sound pressure levels at sensitive receptor locations and at external property boundary lines based on the maximum noise limits stated in the regulations.*

**Response:** Manufacturers sound level data for the low-voltage transformers (LVTs) was included in Appendix 7-7 of Exhibit 7. Page three of Appendix 7-7 indicates the LVTs have a sound power level of 66 dBA. The LVTs are co-located with the central inverters, which were modeled using a sound power level of 92 dBA. The difference in sound power levels between the inverters and LVTs is 26 dBA. A mathematical property of decibels is that if one source of sound is at least 10 dB louder than another source, then the total sound level is simply the sound level of the higher source. Therefore, if the sound power levels of the inverters and LVTs were added together, the result would be the same value that was already modeled (92 dBA). For this reason, the LVTs are a negligible sound source and they have not been included in acoustic modeling of the Facility.

Similar to the LVTs, the small electric tracking motors are also negligible sources of sound. Manufacturers sound level data for the tracking motors are not available; however, based on Epsilon’s experience, the sound power levels of tracking motors for solar arrays are typically in the range of 65 to 70 dBA. Additionally, according to the racking manufacturer applications engineer, the tracking motors for the Facility will only operate for approximately 19 minutes per day. This operational time is spread out throughout the entire day (i.e. the motors only cycle for a few seconds at a time). The sound level limits presented in the 94-c Application that apply to operational sound from the Facility are based on an 8-hour Leq. Nineteen minutes represents 3.96% of an 8-hour time period. A 3.96% usage factor results in a 14 dBA correction based on the following equation:

$$10 \times \text{LOG} (0.0396) = -14.$$

Therefore, based on a 70 dBA sound power level, the total corrected 8-hour Leq sound power level of a tracking motor accounting for their minimal operational time is approximately 56 dBA. (70 dBA – 14 dBA = 56 dBA). The shortest distance from a non-participating receptor to a Facility component is 850 feet (259 meters). Based on the corrected sound power level and this



distance, the 8-hour Leq of a tracking motor would be <1 dBA at the closest non-participating receptor. For these reasons, the tracking motors are a negligible sound source and they have not been included in the acoustic modeling of the Facility.

The generator located at the collector substation is an emergency generator. Therefore, because the generator is for emergency use, it has not been included in the acoustic modeling.

The heating, ventilation, and air conditioning (HVAC) equipment located at the control house of the substation has been added to the acoustic model provided in Attachment E.

- 2. 19 NYCRR §900-2.8(b)(2)(iii) requires that "...[s]hould a prominent tone occur, the broadband overall (dBA) noise level at the evaluated non-participating position shall be increased by 5 dBA for evaluation of compliance..." 19 NYCRR §900-2.8(e)(2) requires that "[f]or substation transformers and other solar facility noise sources (such as inverters/medium to low voltage transformers) where no manufacturer's information or pre-construction field tests are available, the sounds will be assumed to be tonal and prominent." After revising the computer noise modeling to include the control house HVAC equipment and generator as described above, please reevaluate the substation only sound pressure levels based on the design goal for the Solar Facility, accounting for tonality (if needed) at nonparticipating residences.*

**Response:** Revised results of the substation only acoustic modeling are provided in Attachment F (Revised Table 7-5.1A, Revised Table 7-5.1B and a revised sound contour figure, Figure 7-5). The highest sound level under this scenario is 32 dBA at a non-participating receptor. This sound level meets the design goal of 35 dBA, assuming the 5 dBA tonal penalty, which is likely for a substation transformer. The revised results demonstrate that the sound levels due to operation of the substation and the HVAC units are compliant with the sound level limits presented in the 94-c Application.

- 3. 19 NYCRR §900-2.8(j)(1) requires noise modeling "...[f]or the main phases of construction, and from activities at any proposed batch plant area/laydown area." Please provide modeling for the batch plant or indicate that a batch plant will not be used during the construction phase.*

**Response:** The Facility will not involve the use of a batch plant, therefore no additional modeling has been performed.

4. 19 NYCRR §900-2.8(p)(3) requires “[s]ite plan and elevation details of substations, as related to the location of all relevant noise sources (e.g., transformers, emergency generator, HVAC equipment, and energy storage systems, if any); specifications, any identified mitigations...” Please confirm whether the generator shown on the Collector Substation Layout (Appendix 7-6) is an emergency generator.

**Response:** The generator shown on the Collector Substation Layout (Appendix 7-6) is an emergency generator.

5. 19 NYCRR §900-2.8(p)(5)(ii) requires the application to contain “[s]ound information from manufactures for all noise sources as listed above, and any other relevant noise sources.” Please provide manufacturer sound data for the generator and control house HVAC equipment located within the collector substation fenced area.

**Response:** The generator has not been included in acoustic modeling because it is for emergency use only. The acoustic modeling has been revised to include the HVAC equipment located at the control house of the collector substation area. The manufacturer sound level data for these HVAC units (Bard W60AC) is provided in Attachment E.

6. 19 NYCRR §900-2.8(c)(2) requires “...[c]umulative noise analysis... within a three thousand (3,000)- foot radius from any noise source proposed for the facility or within the thirty (30) dBA cumulative noise contour, whichever is greater.” Please include turbines and any other noise sources associated with the Jericho Rise, Noble Chateaugay, and Noble Clinton wind facilities in the cumulative impact analysis, as well as noise sources associated with any additional renewable energy generating facilities located within the 3,000-foot radius or thirty dBA contour.

**Response:** Cumulative sound level modeling of nearby wind facilities with proposed solar facilities is not required by 19 NYCRR §900-2.8(c)(2). The subpart states: “For solar facilities, the evaluation shall include, at a minimum, all sensitive receptors within a one thousand five hundred (1,500) foot radius from any noise source (e.g., substation transformer(s), medium to low voltage transformers, inverters, energy storage) proposed for the facility or within the thirty

(30) dBA noise contour, whichever is greater. For the cumulative noise analysis, the evaluation shall include noise from any solar facility and substation existing and proposed by the time of filing the application and any existing sensitive receptors within a three thousand (3,000) foot radius from any noise source proposed for the facility or within the thirty (30) dBA cumulative noise contour, whichever is greater.”

For this reason, cumulative sound level modeling of the Brookside Facility and nearby wind energy facilities has not been performed. In addition, the highest predicted sound level impact from the Brookside Facility at a residence is 37 dBA. The Facility has a limit of 45 dBA equivalent continuous sound level (Leq) (8-hour) at non-participating residences and a prohibition on producing prominent tones, otherwise a 5 dBA penalty applies. The inverter currently under consideration for this Facility has a tone at 5,000 Hz. Therefore, the effective limit for non-participating residences is 40 dBA Leq (8-hour). In any instance, if a cumulative impact from a nearby wind facility did exceed 40 dBA, it would mean that the wind turbines are the dominant source of sound and not the solar facility (e.g. the wind turbines would need to produce a sound level of at least 38 dBA at the location predicted to receive 37 dBA from the Brookside Facility to result in a total sound level greater than 40 dBA).

### **Exhibit 8 – Visual Impacts**

1. *19 NYCRR §900-2.9 (a)(4) requires the exhibit to include “[t]he appearance of the facility upon completion, including building/structure ...architectural design... facade colors and texture”. No building elevations were found in Exhibits 8 or 5. Please provide exterior architectural design and elevations of each of the control buildings with façade colors and texture identified.*

**Response:** The Facility will not have an operations and maintenance (O&M) building. Two buildings are being proposed. One is the collector control house located within the footprint of the collector substation, to be sited approximately 1,200 feet northwest of County Route 23, which is one of the closest year-round publicly available locations from which the building may be visible. The collector control house will be a light gray steel building, with associated lighting as identified in Attachment C. See sheets HV-P.02.02 and HV-P.14.01, HV-P.15.01, and HV-P.15.02 for additional details on this building. A description of the major component types and

respective heights above ground are described in Section 10.1.7 of the Visual Impact Assessment (VIA) and includes the acknowledgement of the 12-foot control house. In Attachment C, Revised Appendix 5-1, Sheet HV-P.02.02 has been updated to note the façade color and texture.

The second building is a control house in the POI substation, just beyond the collector substation noted above. In Attachment C, Revised Appendix 5-1, the section C-C cut arrows have been extended on sheet 422299-0002-001 to capture and show the POI substation's control house in the section cut elevation view on sheet 422299-0005-001, along with the requested information.

2. *19 NYCRR §900-2.9(b)(1) requires "...[a] line-of-sight profile shall also be done for resources of statewide concern located within the VIA study area."*
  - a. *Table 8-4 identifies five (5) federal and state visually sensitive resources and page 41 notes "[f]ive state resources within the VSA." Please reconcile or explain why only four (4) line-of-sight profiles are included in Exhibit 8.*
  - b. *Table 8-4 identifies three (3) National Register Eligible sites with potential visibility identified as "Not Likely." Please provide additional line of sight profiles, or other evidence, documenting potential visibility from these locations.*

**Response:**

- a) The Applicant provided a line-of-sight profile from all five resources of statewide concern with visibility of the Facility as required by the regulations, therefore the Applicant does not believe this should have been identified as a deficiency. Table 8-4 and page 25 of the VIA identifies five state resources. VIA Table 8-4 also distinctly recognizes that two resources are mutually inclusive of each other; in fact, one resource location has two separate and distinct designations assigned to the same physical resource. The four Line of Sight (LOS) profiles therefore represent the five resources. The representative resource is noted in the title of the LOS figures. LOS 4 identifies the two representative resources in the title of the profile figure.

The state resources are:

- 1) NYS Snowmobile Trail C8C is one resource. This LOS is depicted in LOS 1, Attachment 4 of the VIA.

- 2) NYS Public Fishing Rights - Chateaugay River is one resource. Depicted as LOS 2, Attachment 4 of the VIA.
  - 3) NYS Public Fishing Rights – Marble River is one resource. Depicted as LOS 3, Attachment 4 of the VIA
  - 4) Military Trail NYS Scenic Byway (also designated as NYS Bike Route 11) are two mutually inclusive resources that are the same physical feature. This resource is a state highway, and it is also a NYS scenic byway. One LOS as LOS 4 in Attachment 4 of the VIA satisfies the requirement as it shows both resources in one profile.
- b) As indicated in the response above, the Applicant has provided LOS profiles from resources of statewide concern with potential visibility of the Facility, and the requirement for providing LOS profiles has been met. The regulations do not require that all resources listed in Table 8-4 with any potential visibility must have LOS performed. Regulation §900.2.9 (b)(1) states specifically that LOS be completed for statewide resources of concern. The eligible historic sites are federally designated as noted in the VIA as well as Exhibit 9. The National Park Service, a federal administration, administers the National Register of Historic Places (NRHP) and the eligible historic sites in the visual study area (VSA) were evaluated according to the National Park Service's National Register Bulletin No.15 Criteria for Evaluation. The information provided in Exhibit 8 is consistent with Exhibit 9 federal criteria evaluation methodology and findings as well as the Historic Architectural Resources Survey and Effects Report. This federal designation is also reflected in VIA Table 8-4 heading for NRHP-Listed Historic Sites as well the Table 8-4 Footnote #3 (page 21) and discussion on page 22 of the VIA.

Notwithstanding, evidence documenting potential visibility of the three site is already provided within VIA Table 8-4. Table 8-4 lists the visual resources and provides the results of predicted visibility from the mandatory Exhibit 8 viewshed analysis (per §900.2.9 (b)(1)) as it relates to these resources. See the last column in Table 8-4 entitled “Potential Visibility”. These assignments of potential visibility are not random. This table column records the results of visibility viewshed analysis at noted in Table 8-4 Footnote #1.

Furthermore, discussion of visibility or the nature of visibility at any these federally designated eligible historic sites listed in the table that have a possibility of Facility visibility is

already provided in greater detail in the VIA on pages 35-36. In these discussions there are also references to photos in the VIA Attachment 3 Facility Photolog.

- For Bova House, please refer to the discussion on page 35 of the VIA. Please also refer to photo VP45 in VIA Attachment 3 Facility Photolog.
- For 474 Jamison Line Road please refer to discussion on page 35 of the VIA along with photo VP42 in the Project Photolog.
- For 1207 County Route 23, please refer to the discussion on page 36 of the VIA along with photo VP53 in the Facility Photolog.

Please also recognize (stated on page 22 of the VIA) in a letter dated January 11, 2022, the State Historic Preservation Office (SHPO) concluded that the Facility will have No Adverse Impact to historic and cultural resources. This letter is included in VIA Attachment 5 as well. SHPO did not request any additional visual information or studies.

3. 19 NYCRR §900-2.9(b)(4) requires that viewpoint selection be based upon the following:
- (iii) “[l]evel of viewer exposure (i.e., frequency of viewers or relative numbers, including residential areas, or high-volume roadways).” Please supplement Exhibit 8 with information regarding level of viewer exposure including, but not necessarily limited to local population data and Annual Average Daily Traffic (AADT) data regarding viewer exposure from high volume roadways.*
  - (iv) “[p]roposed land uses.” Please identify how proposed non-project land uses within the visual study area were considered in viewpoint selection.*
  - (v) “[a]ssessment of visual impacts pursuant to the requirements of adopted local laws or ordinances.” Please supplement Exhibit 8 with a discussion regarding visual impacts related to the requirements of local laws or ordinances.*

**Response:**

- a) The VIA describes and provides information on viewer exposure and level of visibility on roadways for every road that encounters predicted visibility within the VSA. Please refer to Section 10.1.4, where descriptions of visibility as it occurs on roadways is parsed out for roads within Distance Zone 1 (0 to 0.5 miles) and for roads within Distance Zone 2 (between 0.5 and 2.0 miles). This section quantifies visibility on the roadways expressed as linear feet

of visibility, high volume or low, and describes of the nature of the roads themselves (rural low-frequency travel with lower viewer exposure, highways with greater viewer exposure).

Generally, U.S. State Routes and County Routes have higher volumes of traffic. As noted above, these high-volume roads and associated visibility are itemized in Section 10.1.4 of the VIA. Additionally, Section 10.1.4 explicitly states beginning on page 36 that there are two sets of figures that can be used concurrently with information in Section 10.1.4. Figure 4 in Attachment 2 of the VIA for example, shows where predicted visibility along roadways (and other areas) is expected. These maps have scale requirements as part of the performance criteria. As described in Section 10.1.4, an additional series of large-scale aerial maps are provided in Attachment 3 of the VIA, the Facility Photolog. These maps have been developed to show a zoomed in version of visibility over aerial photos that can be seen over roadways. Moreover, each of these State and County roads, as discussed in Section 10.1.4, also have Facility simulations developed with representative views. A discussion of simulation results and visual impacts is provided in VIA Section 10.2.1. This section describes the representative simulations, viewer exposure and visible impacts, and effects of mitigation in detail. Additional discussion on viewer exposure is made for each of the simulations that are on roadways, as well as a description of the duration of expected views.

- b) Please refer to Section 7.3.2 of the VIA for an existing discussion of the viewpoint selection process as well as the Cumulative Effects Section 13.0 to understand how viewpoints were selected for either existing or proposed Facility and non-Facility land uses. Ten simulations viewpoints were provided in the Application, based on consultations with the affected municipalities, and all viewpoint locations are outside of the Facility Site on non-Facility land. As noted in Exhibit 2 and Section 7.3.2 of the VIA, the Applicant conducted outreach with affected agencies and municipalities. As part of this outreach, the Applicant worked to identify proposed land uses, and town and agency outreach and correspondence was inclusive in considering viewpoints within non-Facility lands that would include proposed land uses. Please also refer to detailed descriptions of Facility simulations in Section 10.1.4 where reasons for viewpoint selection are explained. Also refer to the last column in Table 8 titled “Comments” which explains why each viewpoint had been selected. As indicated in these sections of the VIA, the affected agencies and municipalities were more concerned with existing resources than “proposed land uses” which may or may not be built.



c) Sections 1.2 and 2.2 of the VIA and Exhibit 24 of the Application, already include a detailed consistency review of adopted local laws or ordinances for the Towns of Chateaugay and Burke with respect to town visual requirements<sup>1</sup> therefore, the Applicant does not believe this should have been identified as a deficiency. The review states on page 7 of the VIA *“While the local laws and codes provide some requirements for visual analyses/assessments, it is concluded that the 94-c regulations will satisfy the requirements for a facility visual impact assessment for the Facility. The 94-c regulations will exceed what the local codes require”*. Local codes have been met, and Exhibit 8 and the VIA for the Facility exceeds what is mandatory. Therefore, any additional analysis is not required or necessary. The entirety of the VIA and Exhibit 8 presented in the Application already provides the discussion of visual impacts that are required under Section 94-c and compatible with adopted local laws.

4. *19 NYCRR §900-2.9(c)(1) requires photographic simulations of the post-construction appearance of the Facility. The Exhibit includes simulations shown after ten years of operation of the Facility. Please provide a simulation at each location indicating the plant sizes at less than 2 years after construction is complete.*

**Response:** The Applicant has met the requirement for mitigation simulations as required by §900.2.9 and therefore this should not have been identified as a deficiency for Application incompleteness. Regulations §900.2.9 8(c)(1) and §900.2.9 8(c)(2) require visual simulations from representative viewpoints with mitigation, which has been achieved and is presented in the VIA. Ten viewpoint locations for a total of 28 simulations were provided. These ten viewpoints provide simulations show the immediate post-construction appearance of the Facility and sufficiently depict how the Facility will look after ten years. Comment 4 request is excessive and results in unreasonably requiring 18 new simulations (9 simulations each with leaf-off and leaf-on mitigation for a different growth stage) beyond the original 28 simulations that were submitted. There is no language in §900.2.9 stating which growth stage must be used for mitigation simulations nor is there a requirement for the growth stage requested.

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<sup>1</sup> In addition to the substantive requirements identified in Exhibit 24, the VIA also satisfies the Towns' procedural requirement to provide “a visual assessment of visual impacts of the Solar Energy Systems on public roadways and adjacent properties.” Although this procedural requirement is supplanted by 94-c, the Applicant nonetheless complies with this requirement through the 94-c Application.



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There are no other 94-c or local laws that require mitigation simulations with less than 2 years of vegetative growth. There does exist a regulation under Facility Construction and Maintenance regarding post-construction monitoring for the first two years. Regulation §900-6.4 l(3) states, “Screen Planting Plans. The permittee shall retain a qualified landscape architect, arborist, or ecologist to inspect the screen plantings for two (2) years following installation to identify any plant material that did not survive, appears unhealthy, and/or otherwise needs to be replaced. The permittee shall remove and replace plantings that fail in materials, workmanship or growth within two (2) years following the completion of installing the plantings”. Regulation §900-6.4 l(3) also does not require simulations at or less than two (2) years.

Upon consultation with the Facility Landscape Architect, for post-construction landscape monitoring, simulations showing less than 2-years mitigation are not needed to depict sizes or assess possible plant failures and replacements because a hired professional will be monitoring the plantings. This professional will assess the state of growth in real-time and will use the remaining plants that are not failing as reference and make the appropriate judgement for species replacement heights and widths. A paper picture is deemed unnecessary and unusable and is not typical or consistent practice for use as a reference vs. real-time monitoring.

Notwithstanding, the Applicant has provided mitigation simulations with a growth stage representing 1 to 2 years following construction for two viewpoints to show representative plant size; VP4 is revised and is representative of a typical mid-distant view showing a panel offset distance from the Military Trail Scenic Byway. VP7 is revised showing a close view from a county road. Table 8-A also provides projected heights for 1-2 years vegetated growth for all proposed plant species. Both the simulations and Table 8-A are included as Attachment G.

5. *19 NYCRR §900-2.9(c)(3) requires "[e]ach set of existing and simulated views of the facility shall be compared and rated and the results of the VIA shall be summarized." Please revise Exhibit 8, Attachment 6, or the cover page of each photo simulation to include a table which includes pre- and post-mitigation comparison rating. Please include a summary of how the totals have been assessed and if any viewpoints have received corresponding mitigation screening.*

**Response:** Regulation §900.2.9 8(c)(3) states that simulated views of the Facility shall be compared and rated, and the results shall be summarized. Where visual impacts from the

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facility are identified, contrast minimization and mitigation measures shall be identified, and the extent to which they effectively minimize such impact shall be discussed. This has been fully achieved according to the regulation. As Section 10.3 states on page 56 of the VIA, “*Simulations illustrating representative views of the Facility, without mitigation, were rated to evaluate contrasts under worse-case conditions*”. Documentation of the steps followed in the rating and assessment methodology has been provided in Section 9.0. How rating values and totals were obtained is discussed in Section 10.3. Further methodology on how contrast ratings are applied is described in Attachment 6 of the VIA.

Comparative rating results for simulations and a corresponding summary table (Table 9) and related discussion is presented in the VIA and thus satisfies the requirement according to the regulation. For each simulation viewpoint mitigation measures are identified and the effects of mitigation where visible in the simulations is also noted, summarized and discussed in Section 10.2.1. In its assessment, the Applicant has submitted simulation contrast ratings which are equivalent to providing the highest maximum visual impact values possible to be obtained. The Applicant’s consultants concluded that any mitigation would lower the rating values. Notations on simulations providing post-mitigation comparative ratings for every viewpoint is not required by the 94-c regulations

6. *19 NYCRR §900-2.9(d) requires “an assessment of ...visual offsets...” Please supplement Exhibit 8 to include additional narrative discussion concerning how the Applicant’s proposed Facility utilizes visual offsets to avoid, minimize or mitigate visual impact to the maximum extent practicable.*

**Response:** Generally, compensatory visual offsets are usually used in unique and special circumstances. The New York State Department of Environmental Conservation (NYSDEC) 2019 *Assessing and Mitigating Visual and Aesthetic Impacts* (Visual Policy) guidance policy states that offsets should be employed in sensitive locations where significant impacts from a project are unavoidable, or mitigation of other types would be economically infeasible, or mitigation is only partially effective. However, the Visual Policy further states offsets should be employed, generally as a last choice, when significant improvement can be expected at reasonable cost and mitigation, or avoidance would be unreasonable.

The Visual Policy also states that all appropriate onsite measures should be employed before the use of an offset is considered. There are no special circumstances that warranted a compensatory visual offset to correct a visual issue (such as removal of existing blighted structures, or restoration and maintenance of neglected cultural resources or other parks). As described herein and within the VIA, the Applicant has used appropriate onsite measures to mitigate and minimize visibility of the Facility.

Several sections within the VIA describe general non-compensatory visual impact minimization remedies. The most obvious mitigation and minimization strategy employed is vegetated landscaping. However other general offsets to minimize aesthetic impacts takes place through initial siting. In many areas panels have been sited at distance from roadways which has the effect of diminishing size and scale of the Facility. Simulation descriptions in Section 10.2.1 of the VIA where applicable notes when distance setbacks are used or observed (such as VP4, VP9, and VP46 in Section 10.2.1.1, for example).

Other general non-compensatory initial offsets that focus on siting are discussed in Section 11.1. Some examples in Section 11.1 include minimizing vegetation clearing outside of the arrays to preserve existing trees and other vegetation to the best extent possible; siting the Facility from sensitive agency recognized and listed visual receptors as best as practicable; siting from larger population centers to minimize potential visibility by a relatively larger number of viewers; and siting the collection substation and switchyard proximal to the existing transmission ROW for minimally distant new interconnects.

7. *19 NYCRR §900-2.9(d)(9)(iii) requires “[u]sing task lighting as appropriate to perform specific tasks; limiting the maximum total outdoor lighting output based on the lowest allowable OSHA limits.” Sheet PV-C.08.03 presents “[P]V entrance gate lighting” inconsistent with the regulatory requirement to limit exterior lighting to perform tasks. Please revise the Lighting Plan and associated drawings to remove lighting at the array entrance gates or provide a description of why the array entrance gate lighting is required under OSHA or NESC.*

**Response:** At the collection substation, lights are located on such structures as the takeoff, control house, CT metering, and four pole mounted locations, two of which are located near entries to the substation. A note has been added to sheet PV-C.08.03 in Revised Appendix 5-1 to state lighting will be capable of manual activation/shut-off with most facing downward (60-75

degrees) to minimize potential impacts to the surroundings. Lighting has been designed to provide an average of two foot-candles to eliminate unnecessary light trespass beyond the substation. Light fixtures will be mounted at a height not to exceed 15 feet above finished grade and will not be illuminated during unoccupied periods. Full cut-off fixtures and task lighting will be used wherever feasible as specified in the Lighting Plan. As the lights will be capable of manual shut-off, they will only be on when the substation is accessed. Substation lights are included for operation and maintenance and security. Substation maintenance is typical during the low energy production hours of the night when lights would be needed.

Lights will also be placed at entry gates. Gate lights will be directed downward and will be equipped with top and side glare shields or baffles to reduce light trespass onto adjacent properties and will be capable of manual or auto-shutoff switch activation. Lights will be installed facing downward (60 degrees) to minimize potential impacts to the surrounding public. Lighting at these locations have been designed to provide an average of two foot-candles, to eliminate unnecessary light trespass. Light fixtures will be mounted on poles at a height not to exceed 15 feet above finished grade. Full cut-off fixtures and task lighting will be used wherever feasible, as specified in the Lighting Plan. These lights are included for operation and maintenance. Lights at the gates allow for visible entry, as well as illuminating a nearby entry point for security cameras and assist in securing the Facility Site through use as a deterrent. Facility maintenance may be conducted during the night to minimize energy production impacts.

### **Exhibit 9 – Cultural Resources**

1. *19 NYCRR §900-2.10(a)(5) requires “[a]n Unanticipated Discovery Plan that shall identify the actions to be taken in the unexpected event that resources of cultural, historical, or archaeological importance are encountered during the excavation process.” Please update the UDP to include contact details for OPRHP, THPO, the New York State Department of Public Service (DPS), and ORES Staff and provide the referenced OPRHP Human Remains Discovery Protocol.*

**Response:** The Unanticipated Discovery Plan (UDP) has been updated to include contact details for the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), Tribal Historic Preservation Office (THPO), New York State Department of Public Service

(NYSDPS), and ORES Staff. The SHPO Human Remains Discovery Protocol is parenthetically cited in Exhibit 9 text, included as Attachment H. The referenced OPRHP Human Remains Discovery Protocol itself has been added as Attachment I, Additional Appendix 9-6.

### **Exhibit 10 – Geology, Seismology and Soils**

1. 19 NYCRR §900-2.11(a)(4) requires the Application to “[c]haracterize subsurface conditions where hydraulic horizontal directional drilling is proposed...” Please provide a description of subsurface conditions at the proposed HDD locations at Stuart Road, U.S. Route 11, County Road 23, and around inverters 2, 12, and 17.

**Response:** Per section 2.1, Soil Borings, of the Geotechnical Report: AES – Brookside Solar Project, provided by ANS Geo, Inc. and dated April 16, 2021, “soil borings, proposed by ANS Geo and confirmed by AES review, were located at relatively evenly spread locations throughout the project's array area(s).”

Information on subsurface conditions was gathered during the 2021 geotechnical investigation as described above and can be used to describe conditions throughout the site. Information on subsurface conditions described below is taken directly from the Geotechnical Engineering Report. For additional information on subsurface conditions refer to Appendix 10-1 of Exhibit 10.

Stuart Road HDD: subsurface conditions around Stuart Road can be characterized by about 6 to 12 inches of topsoil underlain by a sandy clay to about 20 feet below grade surface (bgs). Bedrock was not encountered in the soil boring and is not anticipated to be encountered during drilling.

U.S. Route 11: subsurface conditions around U.S. Route 11 can be characterized by about 6 inches of topsoil underlain by a stiff silty clay to about 20 feet bgs. Bedrock was not encountered in the soil boring and is not anticipated to be encountered during drilling.

County Road 23: subsurface conditions around County Road 23 can be characterized by 0-12 inches of topsoil underlain by a stiff silt and clay layers to depths ranging from 11.5 feet bgs to 16.5 feet bgs, which is then underlain by a dense sand layer which extends to the bottom of boring at 20 feet bgs.

Subsurface conditions around each inverter location consist of about 6 to 12 inches of topsoil underlain by unconsolidated sediments, including silt and clay layers. Bedrock was not encountered in any of the soil borings and is not anticipated to be encountered during installation of inverters. If it is found that subsurface conditions in inverter locations is not suitable for inverter placement during preconstruction analysis from a geotechnical perspective, engineered solutions, for example excavation and backfill, will be implemented to maintain design layout.

### **Exhibit 11 – Terrestrial Ecology**

1. *19 NYCRR §900-2.12(a) requires “[a]n identification and description of the type of plant communities present on the facility site, and adjacent properties within one hundred (100) feet of areas to be disturbed by construction...” Please update Table 11-1 to describe all plant communities and species for adjacent properties within 100’ of areas to be disturbed by construction.*

**Response:** Table 11-1 of Exhibit 11, Section (a)(1), describes plant community types and species within and up to 100 feet from the Facility Site. The corresponding text has been updated as Attachment J to more accurately describe the contents of the table.

2. *19 NYCRR §900-2.12(d) requires “[a] list of the species of mammals, birds, amphibians, terrestrial invertebrates, and reptiles that are likely to occur based on ecological communities present at...the facility...”*
  - a. *Please provide a single consolidated list of species likely to occur in the Facility site or note the appropriate cross references. Please include terrestrial invertebrate and vole species on the species list.*
  - b. *Please include locations of Canada thistle (*Cirsium arvense*) in Figure 1 Pre-Construction Mapping of Invasive Species of Appendix 11-1.*

**Response:**

- a. The narrative within revised Exhibit 11 (Attachment J) has been updated to include terrestrial invertebrate and vole species likely to be found within the plant community types identified on the Facility Site in Table 11-3.

b. Figure 1 of Appendix 11-1, the Invasive Species Management and Control Plan, provided as Attachment K has been updated to show locations of Canada thistle (*Cirsium arvense*) within the Facility Site.

### **Exhibit 12 – NYS Threatened or Endangered Species**

1. 19 NYCRR §900-2.13(d) requires that “...[a]n identification and evaluation of avoidance and minimization measures incorporated into the facility design, as well as any unavoidable potential impacts to NYS threatened or endangered species or species of special concern. Adverse impacts shall be summarized by species impacted and include an assessment of the acreage and/or an estimate number of individual members of each such species affected.” Please revise Exhibit 12 and Section 3.0 of Appendix 12-5 to include detailed descriptions of the proposed measures that have been incorporated into the Facility design to avoid, minimize or mitigate potential significant adverse impacts to the identified species of grassland birds. Please include discussion of the proposed laydown area and its location in occupied habitat. If impacts cannot be avoided, please provide information regarding the duration of impacts and any proposed minimization measures, and revise Figure 3 to include the proposed laydown area and the estimated take of breeding habitat.

**Response:** Avoidance and minimization of potential impacts to grassland bird species is accomplished through adherence to the USCs, use of best management practices (BMPs), and construction monitoring. As stated within Section 3.0 of the Net Conservation Benefit Plan, “impacts to listed grassland species during Facility construction will be avoided and/or minimized through the following measures:

- Environmental monitoring will be implemented immediately prior to and during construction in the occupied habitat to search for NYS-listed threatened or endangered species occurrence based on the species’ seasonal windows for presence.
- If active nests of the NYS-listed threatened or endangered species are found within the occupied habitat, then the Applicant will coordinate with the NYSDPS and the Office to adjust the LOD and/or adjust the construction schedule to avoid work in the area until nesting has been completed.



- To avoid direct impacts to NYS-listed threatened or endangered grassland bird species, the following work windows will be applied for all ground disturbance and construction-related activities, including restoration and equipment/component staging, storage, and transportation, within occupied habitat:
  - In NYS-listed threatened or endangered grassland bird-occupied breeding habitat, work will be conducted only between August 16 and April 22.
- If fields within identified occupied breeding habitat are planted with row crops (e.g., corn, beans, or vegetables) in the farming season prior to the commencement of Facility construction and such fields were historically used for row crops during at least one of the prior 5 years, these fields will not be subject to the construction timing restrictions mentioned above.
- If construction activities that must occur between April 23 and August 15 in identified NYS-listed threatened or endangered grassland bird-occupied breeding habitat outside the row crop areas described above, the occupied habitat area(s) proposed for active construction will be assessed by an onsite Environmental Monitor or biologist, who will conduct surveys for NYS-listed threatened or endangered grassland bird species. The surveys will occur weekly until construction activities have been completed in the occupied habitat area, unless otherwise agreed to by the Office. If no NYS-listed threatened or endangered grassland bird species are detected during the survey, the area will be considered clear for 7 days, when another survey will be performed. If NYS-listed threatened or endangered grassland bird species are detected, the Applicant will comply with subdivision (o)(7) of the USCs, as described below.
- All temporary disturbance or modification of established grassland vegetation communities that occurs as a result of Facility construction, restoration, or maintenance activities will be restored using a flowering herbaceous native pollinator seed mix or the pre-existing grassland vegetative conditions by re-grading and re-seeding with an appropriate native seed mix after disturbance activities are completed, unless returning to agricultural production or otherwise specified by the landowner. These temporarily disturbed or modified areas include all areas within the Facility Site that do not have impervious cover, such as temporary roads, material, and equipment staging and storage areas, and electric line ROWs.



2. 19 NYCRR §900-2.13(f) requires “...[a] Net Conservation Benefit Plan prepared in compliance with section 19 NYCRR §900-6.4(o)...” Please supplement Section 4.2 of Appendix 12-5 with detailed plans for the on-site mitigation parcel, including: the acreage to be created and managed as grassland habitat; the location of that acreage within the parcel; a description of the specific management actions (i.e., brush hogging, tree clearing, plantings) proposed to create suitable habitat; and where such actions are proposed within the parcel. Please provide mitigation and management locations as shapefiles. Please note that mitigation parcels must be located a minimum of 250 meters from wind turbines.

**Response:** The Applicant is committed to establishing 131.6 acres of mitigation for grassland breeding birds and is currently working to secure the necessary amount of land as close as practicable to the Facility Site. Per the requirements of 19 NYCRR § 900-6.4(o)(3)(ix), the Applicant is proposing permittee-implemented grassland breeding bird habitat conservation in lieu of payment of a mitigation fee. The mitigation parcel(s) chosen will follow the guidelines in Section 4.3.1. Once a mitigation area is established, the Applicant will perform vegetation management (e.g., mowing) as necessary to establish and maintain grassland habitat within the mitigation area.

### **Exhibit 13 – Water Resources and Aquatic Ecology**

1. 19 NYCRR §900-2.14(a)(2)(i) requires the application to address “[a]ll existing, active water supply wells or water supply intakes located within 100 feet of any collection lines or access roads.” 19 NYCRR §900-2.14(a)(2)(iii) requires the application to address “[a]ll existing, active water supply wells or water supply intakes located within 200 feet of solar pier/post driving locations...” Please revise Figure 13-1 to clearly indicate which of the located water supply wells within 100 feet of any collection lines or access roads, or within 200 feet of solar pier/post driving locations are currently active. Please provide GIS shapefiles for all identified active and inactive well locations.

**Response:** Figure 13-1 has been revised to note which water supply wells are currently active. The updated figure and GIS shapefiles are provided in Attachments M and N, respectively.

The surveyed wells shown on Figure 13-1 were not depicted on the drawing packages with the original Application due to limited information received by the Applicant relevant to exact well locations. However, wells documented by the State with coordinates were depicted on the drawings. Given the limited information on the exact location of private wells, the Applicant identified six wells through parcel tax ID numbers (Parcels 59.-4-11, 60.-1-3, 60.-1-9.100, 60.-2-21.300, 60.-3-4, and 74.-1-5.100). Prior to construction, the Applicant will identify whether these wells are within close proximity or overlap with Facility components (within 100 feet of collection lines or access roads, 200 feet of solar piers or posts, or 500 feet of an HDD operation). Once these six wells have been identified within the regulated Facility component buffers, pre- and post-construction monitoring will occur.

The NYSDEC has identified a water well on parcel 59.-3-16.100, adjacent to proposed solar panels, but over 500 feet from the nearest residence. However, the landowner of that parcel has indicated that there is no active drinking water supply well on the property. Even if there was a well at the location that NYSDEC identified, it would not be an active drinking water supply well due to an assessment of aerial imagery (its location within a forested area). Figure 13-1, included with the original application, depicts this NYSDEC-identified well on Sheet 1 of 4.

- 2. 19 NYCRR §900-2.14(b)(1) requires “[a] map or series of maps showing delineated boundaries of all federal, state and locally regulated surface waters on the facility site and within 100 feet of areas to be disturbed by construction, including the interconnections...” Please revise Figure 13-3 to label and symbolize the jurisdiction of streams (e.g., Federal, State, unregulated, etc.) on site within the LOD and 100 feet of disturbance and depict the 50-foot buffer around all NYS regulated streams.*

**Response:** Figure 13-3, included as Attachment O, has been revised to label and symbolize the jurisdiction of streams and depicts the 50-foot buffer around State-regulated streams.

- 3. 19 NYCRR §900-2.14(b)(3) requires, “...[a] description of the New York State listed Water Quality Standards and Classification, ambient standards and guidance values, flow, presence of aquatic invasive species and other characteristics...” of surface waters depicted on the map. Please provide the ambient standards and guidance values, which can be found on the NYSDEC website at: [https://www.dec.ny.gov/docs/water\\_pdf/togs111.pdf](https://www.dec.ny.gov/docs/water_pdf/togs111.pdf).*

**Response:** Within the guidance document provided, it states “The primary purpose of this document is to provide a compilation of ambient water quality guidance values and groundwater effluent limitations for use where there are no standards (in 6 NYCRR 703.5) or regulatory effluent limitations (in 703.6).” However, Table 13-3 in Exhibit 13 already discusses the NYSDEC Water Quality Standards as defined in 6 NYCRR Part 703 and 704 that are applicable to the delineated streams. Regardless, NYSDEC’s water quality guidance value types for toxic pollutants based on water class have been added to Table 13-2 within Attachment L, Revised Exhibit 13. The Facility will comply with current water quality standards and guidance values, as appropriate.

4. *19 NYCRR §900-2.14(b)(6) requires “[i]f the applicant cannot avoid all impacts to NYS protected waters, an explanation of all efforts the applicant made to minimize the impacts, including a discussion of all best management practices used during design...”*
  - a. *Figure 13-3 displays the LOD across Stream S-WCR-2 (Class C(T)). Please clarify if there are activities proposed in this area of the LOD and discuss measures of avoidance and minimization of impacts. If potential impacts to this protected stream will not be avoided, please revise Exhibit 13, section 13(b)(7) to include discussion of the relevant factors and potential mitigation measures in the context of a Stream Restoration and Mitigation Plan.*
  - b. *Per 19 NYCRR §900-2.14(b)(6)(iv) and §900-2.14(b)(6)(vi) please provide further discussion regarding the tree clearing, grading, and related activities proposed within 50-feet of streams S-JJB-2 and S-WCR-2 and the efforts to avoid and minimize these impacts.*
  - c. *Per 19 NYCRR §900-2.14(b)(6)(v) please discuss measures taken to account for slopes and erosion potential of NYS protected waters, including an analysis of the impacts of construction activities such as grading and tree clearing on slope, shade, and stabilization, and describe any vegetation proposed to remain in place after selective tree clearing is completed. Please reference midstory vegetation per the requirements of 19 NYCRR §900-2.14 (6)(vii).*

**Response:**

- a. The LOD currently crossing S-WCR-2 has been updated on Revised Figure 13-3 (Attachment O) and Revised Appendix 5-1, Sheet PV-C.01.07 (Attachment C) to reflect the underground

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work being done at this location. The original depiction of the LOD in that location has been revised to depict the HDD pits to be installed on either side of the stream. The HDD pits are proposed further than 50 feet from S-WCR-2, and more than 6 feet below the stream bed. Therefore, there will be no impact to S-WCR-2.

These updates are reflected in existing conditions & clearing plan sheets (where applicable), the site plan sheets, the grading, drainage, and erosion control plan sheets, and enlarged landscape plan sheets, included in the Revised Appendix 5-1 in Attachment C.

b. The only impact proposed within the 50-foot adjacent area of State-jurisdictional stream S-JJB-2 is selective tree clearing. The three points where the LOD crosses S-WCR-2 do not have corresponding physical impacts, as described above. Two additional locations only include selective tree clearing, which will not result in grubbing within the 50-foot State-regulated adjacent area. BMPs will be implemented to avoid and/or minimize possible impacts to the streams as a result of selective tree clearing (i.e., silt fences, use of proper equipment).

These updates are reflected in existing conditions & clearing plan sheets (where applicable), the site plan sheets, the grading, drainage, and erosion control plan sheets, and enlarged landscape plan sheets, included in the Revised Appendix 5-1 in Attachment C.

c. Only selective tree clearing is occurring within the 50-foot buffer of S-JJB-2, as shown on Revised Figure 13-3 and Appendix 5-1, Sheets PV-C.00.03 and PV-C.00.06 (Attachments O and C, respectively). For selective tree clearing, trees will be removed; however, stumps and roots will remain in place and provide stability to these slopes. Removing the tree canopy will promote growth of existing and new herbaceous species, as well as new growth of brush or shrubs, to further stabilize the soils. Currently, no grading is proposed within the S-JJB-2 50-foot buffer.

For clearing occurring within the 50-foot buffer of S-WCR-2, only a small area of selective tree clearing is proposed on Sheet PV-C.00.02 in a relatively low-sloped location. The low slope in addition to the fence that will be installed in this area mitigates the risk of soil erosion. BMPs were implemented to minimize impacts to the 50-foot buffer of S-WCR-2. Grading is not depicted within the S-WCR-2 50-foot buffer. Per Sheet PV-C.14.01, "the solar farm seed mix was developed especially for native grass plantings around solar array fields and shall be utilized accordingly. These grasses will mature out to a height of approximately 2 to 2 ½ feet

high.” This solar farm seed mix will be used anywhere the ground is disturbed. Sheet PV-C.14.01 has been updated within Attachment C to add clarity on general locations for potential uses for seed mixes.

### **Exhibit 14 – Wetlands**

1. *Please discuss and provide a summary table detailing the total acreage of the 38 NYS-regulated wetlands delineated by the Applicant, and the total acreage of associated one hundred (100) foot adjacent areas, as delineated by the Applicant in the pre-application and application processes in compliance with 19 NYCRR §§ 900-1.3(e) and 900-2.15(a).*

**Response:** Attachment P is a revised version of Exhibit 14 that includes a new table, Table 14-1, Delineated Wetland and Regulated Adjacent Area Acreages. This table reflects the total wetland acres within the Wetland Survey Area (all delineated wetlands, regardless of presumed jurisdictional status). Of the 38 wetlands delineated, five are State-jurisdictional. Table 14-2 also reflects the total acreage of 100-foot adjacent areas associated with the five State-jurisdictional wetlands within the Wetland Survey Area. Section 14(B), Table 14-3, has been updated to describe the total acreages that reflect the wetlands and adjacent areas (see Attachment P, revised Exhibit 14 and Attachment Q, Revised Figure 14-1).

2. *19 NYCRR §900-2.15(a) requires “[a] map or series of maps showing jurisdictional boundaries of all federal, state and locally regulated wetlands and adjacent areas present on the facility site and within one hundred (100) feet of areas to be disturbed by construction...”*
  - a. *Please revise the Existing Conditions and Clearing Plan (referenced in Tables 14-1 and 14-2) to include legends and symbology for NYS-regulated wetland adjacent areas, which are currently referenced as Stream Buffers (e.g., PV-C.00.06, PV-C.00.07, PV-C.00.08, PV-C.00.11, PV-C.00.12, PV-C.00.16) to ensure consistency between Exhibit 5 design drawings and Figure 14-1 (Delineated Wetlands).*
  - b. *Please provide updated polygon GIS shapefiles for impacts to wetlands and adjacent areas in Table 14-1 and 14-2. Please ensure that the updated shapefiles include grubbing, undisturbed herbaceous vegetation clearing and the total limits of disturbance, including limits of vegetation maintenance during the operations phase.*

*Please clearly differentiate between areas of forest clearing and selective tree cutting.*

**Response:**

- a. The Existing Conditions and Clearing Plan drawing set has been updated to show stream buffers and wetland adjacent areas in the legend. These updates are reflected in Attachment C, Revised Appendix 5-1 on PV-C.00 sheets, and in their legends.
  - b. An updated set of GIS shapefiles is included as Attachment N, which includes grubbing, undisturbed herbaceous vegetation clearing and the total LOD, including limits of vegetation maintenance during the operations phase. Areas of forest clearing and selective tree cutting are clearly differentiated within these shapefiles.
3. *19 NYCRR § 900-1.3(e)(5) requires that the Applicant provide "...the approved wetland delineation and associated report in the application," and 19 NYCRR § 900-2.15(b) requires that Exhibit 14 include "[a]ny reports detailing the results of the delineation survey(s)."*
- a. *Please supplement Appendix 14-3 to include the July 2021 Wetland and Stream Delineation Report-Brookside Solar Project, referenced in the ORES July 27, 2021 Wetland Jurisdictional Determination.*
  - b. *Please supplement Exhibit 14 to include discussion of the updated December 2021 Wetland and Stream Delineation Report included in the application (Appendix 14-1), including any additional information and/or changes to the July 2021 report concerning NYS-regulated wetlands and one hundred (100) foot adjacent areas. Please include a redlined version of the two reports.*

**Response:**

- a. The only difference between the July 2021 Wetland Delineation Report (WDR) and the December 2021 WDR is a 0.75 acre increase of an isolated wetland (W-JJB-1) which was added as a result of the site visit with the United States Army Corps of Engineers (USACE), and was submitted to ORES and the NYSDEC on December 13, 2021. The slightly modified text and figure from the December 2021 WDR is included as Attachment R.

b. On November 10, 2021, TRC conducted a site visit with the USACE. Wetland W-JJB-1 was adjusted and increased in size from 0.05 to 0.80 acres (0.75-acre increase). This increase was reflected in the updated December 2021 WDR. TRC submitted two new data plots to the USACE and added the additional wetland area to the December WDR which was attached as Appendix 14-1 to the original 94-c Application. No changes were made to State-jurisdictional features. A Preliminary Jurisdictional Determination (PJD) was received from the USACE on July 15, 2022, stating that the wetlands and streams onsite may be subject to the USACE's regulatory jurisdiction. The PJD is included as Attachment S.

4. *19 NYCRR §900-2.15(e) requires "...[a] demonstration of avoidance of impacts to such wetlands and their one hundred (100)-foot adjacent areas by siting all components more than one hundred (100) feet from any delineated NYS wetlands." 19 NYCRR §900-2.15(f) further requires that if the Applicant cannot avoid impacts to all wetlands and adjacent areas, that an explanation be provided of all efforts made by the Applicant to minimize the impact(s) to wetlands and adjacent areas identified in wetlands surveys. For each of the wetlands and adjacent areas identified in Table 14-1 and Table 14-2 (i.e., W-NSD-3, W-JJB-2 and W-JJB-14), please provide an expanded discussion of how the Applicant has avoided impacts to the resources to the maximum extent practicable, with reference to Figure 14-1 and Exhibit 5, as appropriate. If necessary, please supplement Exhibit 14 with a high-resolution map at a scale of 1 inch = 50 feet for each proposed impact area, to demonstrate the extent to which avoidance was achieved.*

**Response:** A discussion has been added to revised Exhibit 14, Section (f)(1), about the constraints to project design including impacts to habitat, landowner preferences, topography, shading, setbacks, and technical feasibility. The wetlands noted above, W-NSD-3, W-JJB-2 and W-JJB-14, are classified as "Unmapped >12.4 acres". In general, initiative was taken to minimize the impacts to these "Unmapped >12.4 acres" wetlands and their adjacent areas during permitting level design. Wetlands W-NSD-3 and W-JJB-2 have small portions of array, LOD, and fence line which have been minimized by the design to have minor impacts within the 100-foot adjacent area. The LOD near W-NSD-3 has been limited and reduced to avoid further adjacent area impacts. In addition, depicted tree clearing areas are likely overestimated to accommodate generalized conditions, and may be reduced during the clearing phases, depending on the specific site conditions at that time.



5. 19 NYCRR §900-2.15(f) requires “...[an] explanation of all efforts made to minimize the impacts to wetlands and adjacent areas identified during wetland surveys...” if they cannot be avoided, for “...each proposed impact area...” 19 NYCRR §900-2.15(f)(2) further requires an explanation of “[h]ow the facility design has minimized proposed impacts to NYS wetlands and adjacent areas.”
- a. Please supplement the general discussion appearing in Exhibit 14, section 14(f), to include site-specific discussion of Applicant’s proposed measures to minimize impacts to the maximum extent practicable of Facility components (e.g., PV panels, fencing, open-trenched collection lines, access roads, laydown areas, HDD pits, tree clearing, and vegetative maintenance) to NYS-regulated wetlands and adjacent areas within each impacted area of wetlands (W-JJB-2, W-JJB-14, and W-NSD-3), with references to supporting information in Appendix 14-1 or Exhibit 5. Please include wetland-specific discussion of “[h]ow the facility design and siting minimize impacts to NYS wetlands, or portions of these wetlands, and the function and values provided by these wetlands” (19 NYCRR §900-2.15(f)(3)), and “[h]ow the facility design and siting will maximize and/or improve the function and values provided by the remaining adjacent areas surrounding the NYS wetlands” (19 NYCRR §900-2.15(f)(4)).
  - b. Please define the parameters of “selective tree clearing” as it pertains to potential significant adverse impacts to Wetland W-JJB-14 (e.g., the overall tree clearing plan, including tree selection criteria, removal techniques and the height and number of trees proposed for selective tree clearing).

**Response:**

a. The Facility design and siting minimizes impacts to NYS wetlands (see Section (f)(2)) using narrow crossing locations and existing crossings wherever possible to access Facility components. All alternatives regarding Facility design were examined and the current design incorporates these alternatives. State-jurisdictional wetland impacts have been eliminated through careful design and study of the Wetland Survey Area. Table 14-3 within Attachment P, Revised Exhibit 14, has been updated to reflect these changes.



Exhibit 14 has been updated to include a discussion of how the facility design and siting will maximize and/or improve the function and values provided by the remaining adjacent areas surrounding the NYS wetlands (see Section (f)(4)).

b. Selective tree clearing will not involve grading or grubbing of stumps. Selective tree clearing will involve cutting trees at least 3 inches in diameter at breast height (DBH) by hand and leaving the trees in place unless otherwise indicated by the Environmental Monitor during construction. Selective tree clearing will be used to reduce shading and will not impact wetland W-JJB-14 or require mitigation per the 94-c regulations. The Applicant's landscaping plan was filed as part of the Application (see Appendix 5-1, Sheets PV-C.13.00 through PV-C.14.07). The tree clearing is also part of Appendix 5-1 (Sheets PV-C.00.01 through PV-C.00.21). Exhibit 11 states that the Applicant plans to remove stumps only where certain Facility components will be located. Twenty of the 46 acres of tree clearing will be selective tree clearing which is defined as the clearing of trees without grading or grubbing of stumps.

6. *19 NYCRR §900-2.15(g) requires that the Applicant provide "...a Wetland Restoration and Mitigation Plan pursuant to 19 NYCRR § 900-10.2(f)(2)..." Please note that Applicant's response as requested above will impact the determination as to whether mitigation is required. For example, and without limitation, ORES will evaluate whether the requested details related to "selective tree clearing" (per 5(b) above) more closely associate this activity with "clearing" which requires mitigation, or "selective cutting." The proposed impacts will dictate the required mitigation ratio as indicated in Table 1 of 19 NYCRR §900-2.15. Please ensure that any proposed Wetland Restoration and Mitigation Plan complies with the parameters set forth in 19 NYCRR §900-2.15(g)(2)(i) through (iv).*

**Response:** Per the response to 5(b) above, selective tree clearing will not involve grading or grubbing of stumps but will involve cutting trees at least 3 inches DBH by hand and leaving the trees in place unless otherwise indicated by the Environmental Monitor during construction. Selective tree clearing does not require any enhancement or mitigation. The wetland mitigation requirements set forth in 19 NYCRR Section 2.15(g) indicate selective tree clearing is an allowed activity and does not require a 1:1, 2:1, or 3:1 mitigation ratio.

## **Exhibit 16 – Effects on Transportation**

1. 19 NYCRR §900-2.17(a)(1) requires a conceptual site plan depicting all Facility driveway and roadway intersections, showing “[h]orizontal and vertical geometry, the number of approach lanes, the lane widths, [and] shoulder widths...” Please provide horizontal and vertical data for drives including, but not limited to, stationing, curve data, bearings, vertical grades, etc. Additionally, when showing roadway widths, please separate the width into “lane width” and “shoulder width,” indicate the material of each and include ranges for all widths listed as variable.

**Response:** Horizontal and vertical geometry of the site entrances were previously provided and are shown on Attachment C Sheets PV-C.08.01 and PV-C.08.02. The horizontal geometry is represented by the proposed grading lines, the to-scale drawing set, and the curve radii provided. The vertical geometry is represented by proposed grading lines, the section views in the two previously mentioned sheets, and through the typical details for the limited use pervious access road and paved driveway apron shown on Sheet PV-C.06.01. The limited use pervious access road section detail shown on Sheet PV-C.06.01 does not show lane and shoulder widths since they do not apply for these access roads, but does call out the materials. Stationing has been added.

2. 19 NYCRR §900-2.17 (d)(3) requires “[a]n assessment of over-size load deliveries, and the adequacy of roadway systems to accommodate oversize and over-weight vehicles, improvements necessary to accommodate such deliveries, impacts associated with any improvements, and mitigation measures appropriate to minimize such impacts...” Please indicate the design of the vehicle used in the turning templates to ensure it correctly represents the oversized vehicles to be used and detail the number, weight, size, and frequency of expected oversized vehicles. Please also investigate potential interference from overhead utilities, clarify whether the intersection of CR 23 and US 11 is the only intersection that would be impacted, and verify that smaller roads/intersections on the haul route do not need to be evaluated.

**Response:** Generally, only transportation of the generator step-up unit (GSU) would possibly exceed the weight and/or size but there is also the possibility that some other special equipment components including substation/switchyard control rooms, substation poles, inverters etc. may

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exceed the weight and/or size and be up to 200,000 lbs. Special hauling permits and/or Road Use Agreements along the Facility offsite haul routes will be obtained prior to delivery including from the New York State Department of Transportation (NYSDOT) and County, as necessary. Road use Agreements will be sought with the appropriate agencies, as necessary, to use local roadways.

A preliminary evaluation of potential for interference from overhead utilities indicates that interference is not expected. The roadway system is adequate to accommodate oversize and overweight vehicles without additional mitigation. If a proposed oversize /overweight route is not feasible, then the condition and load rating of the roadway will be checked during the haul route evaluation. Should that review find reason for concern, the structure will be temporarily reinforced for the oversize/overweight component delivery, or a different route will be utilized. No other improvements are projected to be necessary to accommodate oversize/overweight vehicles that will be used.

To model the deliveries, a WB-67 with a trailer length of 53 feet and a total length of 71 feet was utilized which is the typical design vehicle for transformers and other oversize equipment for this type of facility. The array access roads and turn-arounds on-site were also designed to accommodate a WB-67.

In addition to truck turning template diagrams previously provided for the intersection of CR-23 and US-11, additional turning diagrams are provided as Attachment T for the following intersections:

- US-11 and E Road (Northern and Southern Legs)
- US-11 and Lewis Road
- CR-23 and Ketcham Road (Northern and Southern Legs)
- Stuart Road and East Road

As typical for these types of vehicles, there will be some crossing of the centerline, particularly when right turns are performed. Smaller roads and intersections leading to and from the construction access roads were evaluated as part of this analysis.

Additional information will be provided during the Compliance Filing Stage when further construction level details are determined.

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## **Exhibit 17 – Consistency with Energy Planning Objectives**

1. 19 NYCRR §900-2.18(d) requires “[a] description of the impact the facility would have on regional requirements for capacity.” Please discuss the regional requirements for capacity and identify the Facility’s impact on these requirements.

**Response:** The New York State Control Area (NYCA) is divided into four capacity regions namely Rest of State (ROS), Lower Hudson Valley (LHV), New York City (NYC) and Long Island (LI). The ROS capacity region comprises of Zones A to F, the LHV capacity region comprises Zones G to I, the New York City (NYC) capacity region comprises Zone J, and the LI capacity region comprises Zone K. The LHV, NYC and LI capacity regions are referred to as localities because the ability to import power to these capacity regions is constrained. For capacity market purposes New York Independent System Operator, Inc. (NYISO) has an additional locality comprised of Zones G to J. All NYCA localities have regional capacity requirements. NYISO also has capacity requirements for the whole of NYCA region. But there is no regional capacity requirement for the ROS capacity region.

When NYISO procures capacity, capacities are first procured internally within each locality to meet the regional capacity requirement for each of the NYCA localities. The balance of the capacity required in the localities is then procured from the ROS capacity region. The remainder of the capacity to meet the overall NYCA region capacity requirement is also procured from the ROS capacity region. Therefore, the ROS capacity region provides the balance of capacity to meet the capacity requirements in the localities as well as the capacity required to meet the whole of NYCA region capacity requirement.

The Q880 Brookside Solar Project is located in the ROS capacity region and has applied to participate in the NYISO capacity market. Because of its location in the ROS capacity region, the Brookside Solar project will play a crucial role of contributing to the much-needed renewable capacity to the NYCA localities and, in addition, contribute to the much-needed renewable capacity to the overall regional capacity requirement for NYCA.

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## **Exhibit 18 – Socioeconomic Effects**

1. 19 NYCRR §900-2.19(d) requires “[a]n estimate of incremental school district operating and infrastructure costs due to the construction and operation of the facility, this estimate to be made after consultation with the affected school districts.” Please supplement Exhibit 18 to include information obtained during the Applicant’s consultation with affected school districts.

**Response:** As detailed in the meeting log (Appendix 2-4), the Applicant reached out to the Superintendent of the Chateaugay Central School District (CSD), initially on July 7, 2020. The Applicant spoke via phone with the Superintendent on July 22, 2021, with an in-person meeting on August 13, 2021. A follow up phone call was made on October 1, 2021, with a message left for the Superintendent. School district representatives from the Chateaugay CSD and the Malone CSD were also invited to the Facility’s pre-application meeting held March 12, 2021, as described in Exhibit 2(b)(1). At no point during consultations did the Chateaugay CSD raise concerns about incremental school district operating and infrastructure costs. No information was received from the school districts related to the Facility other than that the Superintendent was interested in the educational value/interest in science, technology, engineering, and math (STEM) that a large solar project can generate for students. Recently (February 1, 2022), AES staff met with the Superintendent to discuss potential partnership opportunities via the AES social impact program – Discovery Education’s STEM Careers Coalition™ that offers educators, students and families nationwide and globally access to free, no cost resources, found at [stemcareerscoalition.org/](https://stemcareerscoalition.org/) that connect students to careers in STEM.

As described in Exhibit 18(d), the largest jobs-related impact would be during the construction period. It is not anticipated that families will relocate for short-term construction jobs. Further, it is anticipated that some portion of the workers during the Facility’s construction and O&M phases will be hired from within the North Country Economic Region, for whom relocation would not be necessary. During the operation of the Facility, 3.5 employees are anticipated to be hired. While the local school districts could enroll a few new students as a result of O&M workers relocating, the impacts are anticipated to be minimal. Therefore, impacts to the school district are not anticipated during the construction and operation of the Facility.

As described in Exhibit 18(g), the Chateaugay CSD is anticipated to receive the largest payments from the payment in lieu of taxes (PILOT) agreement, with a 20-year total of approximately \$7.0 million.

2. *19 NYCRR §900-2.19(e) requires “[a]n estimate of incremental...costs that will be incurred for police, fire, emergency... and other municipal, public authority or utility services during the construction and operation of the facility (this estimate to be made after consultation with the affected municipalities, public authorities, and utilities).” Please include information obtained during the Applicant’s consultation with police, fire, and emergency response.*

**Response:** On February 1, 2022, The Applicant met with first responders, as outlined in the Meeting Log included with the Application as Appendix 2-4, to discuss the Facility and to identify any specific equipment or training deficiencies in local emergency response capacity. The meeting included:

- Kyle Johnston, Town of Burke Fire Chief;
- Jerry Blow, Town of Chateaugay Fire Chief;
- Lloyd Walfield, Board of Burke Fire Department President;
- Kirby Selkirk, Town of Chateaugay Deputy Supervisor; and
- Additional members of the Burke and Chateaugay Fire Departments.

The meeting discussion addressed the Safety Response Plan and Site Security Plan for the Facility. Representatives of the fire departments did not express the need for any additional equipment or personnel related to the construction and operation of the Facility. The Applicant intends to continue conversations with the local fire departments as the Facility proceeds to construction to ensure the departments do not have any concerns.

Additionally, the Applicant met with local Town and County officials as presented in the Meeting Log. First responders were also invited to the March 12, 2021, pre-Application meeting. During the Applicant’s consultation with local law enforcement, fire departments, and other emergency responders, none of the entities identified any incremental costs that they expected to incur as a result of the Project’s construction and operation.

3. *19 NYCRR §900-2.19(i) requires “[a]n analysis of whether all contingency plans to be implemented in response to the occurrence of a fire emergency or a hazardous substance*

*incident can be fulfilled by existing local emergency response capacity, and in that regard identifying any specific equipment or training deficiencies in local emergency response capacity...” Please discuss whether contingency plans in response to an emergency can be fulfilled by existing local emergency (police, fire, emergency response) capacity and identify if there are any specific equipment or training deficiencies after consultation with these agencies.*

**Response:** The meeting discussion on February 1, 2022 addressed the Safety Response Plan and Site Security Plan for the Facility. Additionally, Applicant staff spoke via phone call on January 24, 2022 with the Chairperson of the Chateaugay Brainardsville Board of Fire District. Representatives of the fire departments did not express concerns or provide information related to deficiencies in equipment or training. Therefore, it is the Applicant’s understanding that contingency plans in response to an emergency can be fulfilled by existing local emergency capacity. There were no specific equipment or training deficiencies identified after consultation with these agencies.

### **Exhibit 21 – Electric System Effects and Interconnection**

1. *19 NYCRR §900-2.22(g)(1) requires the Applicant to “[d]escribe the substation facilities to be transferred...” where it is contemplated that a portion of a new interconnection substation to be built will be transferred to the transmission owner. Please verify what entity will be responsible for ownership, operation, and maintenance of the POI switching station after construction.*

**Response:** Ownership of the POI switching station and the tie in lines to the existing transmission lines will be owned, operated, and maintained by the connecting utility, New York State Electric and Gas Corporation (NYSEG), after construction. The tie lines between the POI switching station and the collector will be owned, operated, and maintained by the developer, AES.



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## **Exhibit 22 – Electric and Magnetic Fields**

1. 19 NYCRR §900-2.23(d)(5) requires “[r]egarding magnetic fields, also model the circuit phase currents equal to the maximum average annual load estimated to be occurring on the power lines within ten (10) years after the proposed facility is put in operation...” Please indicate the maximum average annual load estimated to occur on the power lines within ten years and confirm whether this load was evaluated in the electric and magnetic fields (EMFs) Study.

### **Response:**

The EMF Study was conducted with the maximum line ampacity loads, using the Winter Normal Rating. This is the maximum current that can be transferred using this type of wire for the line. This worst-case rating will not increase within 10 years unless the line is reconductored with a different wire type.

The Facility has a loop in loop out connection to the existing NYSEG 911 line and a portion of the current that runs through the Facility’s loop in loop out connection will be through current that is traveling on the 911 line. Please note that what the Applicant has evaluated in the EMF Study is conservative, since the study is based on assumed winter loadings. Refer to Exhibit 22 (Section (d)5) and the EMF Study report for additional information.

## **Exhibit 23 – Site Restoration and Decommissioning**

1. 19 NYCRR §900-2.24(c) requires that the Applicant provide for the Towns of Burke and Chateaugay “[a] gross and net decommissioning and site restoration estimate, the latter including projected salvage value (including reference to the salvage value data source), with line items (and associated dollar amounts) for decommissioning of all facility components...”
  - a. Appendix 23-A states that “[c]osts derived from 2018 RS Means Site Work & Landscaping Costs estimating manual” and that salvage costs were obtained from two different sources during March 2021. Please provide all referenced sources and specific line items and costs from these sources.

- b. Appendix 23-A states that “[a]ssumes 2% annual cost increase from decommissioning and 1.0% annual cost increase from salvage value.” Please provide all costs in 2022 dollars.*

**Response:** The decommissioning estimate table has been updated for 2022 dollars and can be found in Attachment U. In addition, references have been provided for the projected salvage values, including line items and costs from these sources. The Applicant has confirmed that the PV module trim will not be removed prior to recycling; therefore, the reference to salvage value for PV module trim (extruded aluminum) has been removed from the gross and net decommissioning estimate.

Please see the response to the Exhibit 24 deficiency below. Additional information has been provided for the decommissioning estimate, which includes applying the 2% annual cost increase to both the decommissioning and salvage line items, per the Towns’ Solar Law.

#### **Exhibit 24 – Local Laws and Ordinances**

- 1. 19 NYCRR §900-2.25(c)(2) requires that the Applicant provide a demonstration “[f]or requests grounded in factors of costs or economics (likely involving economic modeling), that the costs to consumers associated with applying the identified local substantive requirements would outweigh the benefits of applying such provisions.” Please supplement Exhibit 24 with an analysis (including issue-specific information, tables and/or costs) substantiating the financial burden(s) imposed if the Towns of Burke and Chateaugay Solar Energy Law (2018 and 2019) § 7.E.iii were applicable in comparison to the Office’s net decommissioning and site restoration estimate detailed at 19 NYCRR §§900-2.24 and 900-6.6.*

**Response:** Under Section 7.E.iii of the Towns’ Solar Law an Applicant must provide decommissioning security equal to 125% of the estimated cost of decommissioning the Facility to be increased by 2% every year. This exceeds the ORES requirement for decommissioning security by 10%, a significant and costly difference. Requiring a 125% estimate with a 2% escalator would cause the decommissioning estimate to overestimate costs, causing additional

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costs to the Facility in the form of the financial security, which creates a financial disincentive with little to no actual benefit to the community.

The decommissioning estimate has been updated to show four scenarios for cost comparison after 30 years, which are as follows:

1. ORES 115%
2. Town 125%
3. ORES 115% + 2% increase
4. Town 125% + 2% increase

The year-by-year cost increases for each scenario have been provided as Attachment U.

The original tabulated estimates in Appendix 23-1 of the 94-c Application were based on the Office's requirements, including a 15% contingency, in addition to conservatively adding the Towns' 2% escalator. The Towns' specifications for the decommissioning and site restoration estimates include an additional 10% multiplier to these costs. The estimated cost increases provided in Attachment U for both the additional 10% and the 2% escalator create an overly conservative estimate. The estimate based upon the Towns' specifications is significantly higher, and would pose an undue burden to the Project. Therefore, the 2% escalator was used with the Office's requirements for conservatism (15%).