



**BROOKSIDE SOLAR, LLC**

**Matter No. 21-00917**

**900-2.7 Exhibit 6**

**Public Health, Safety, and Security**

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## Acronym List

AES	The AES Corporation, Inc.
AC	Alternating Current
BMPs	Best Management Practices
CLCPA	Climate Leadership and Community Protection Act
CO <sub>2</sub>	Carbon dioxide
FAA	Federal Aviation Administration
GHG	greenhouse gas
MW	Megawatt
NERC	North American Electric Reliability Corporation
NYCRR	New York Codes, Rules and Regulations
ORES	Office of Renewable Energy Siting
OSHA	Occupational Safety and Health Administration
O&M	Operations and Maintenance
PSC	Public Service Commission
RUA	Road Use Agreement
SEP	State Energy Plan
SPC	Spill Prevention, Containment, and Control
SPDES	State Pollutant Discharge Elimination System
SWPPP	Stormwater Pollution Prevention Plan
USCs	Uniform Standards and Conditions

## Glossary Terms

<b>Applicant</b>	Brookside Solar, LLC, a subsidiary of The AES Corporation, Inc. (AES), the entity seeking a siting permit for the Facility from the Office of Renewable Energy Siting (ORES) under Section 94-c of the New York State Executive Law.
<b>Facility</b>	The proposed components to be constructed for the collection and distribution of energy for the Brookside Solar Project, which includes solar arrays, inverters, electric collection lines, and the collection substation.
<b>Facility Site</b>	The parcels encompassing Facility components which totals 1,471 acres in the Towns of Burke and Chateaugay, Franklin County, New York (Figure 2-1).
<b>Study Area</b>	In accordance with the Section 94-c Regulations, the Study Area for the Facility includes a radius of 5 miles around the Facility Site boundary, unless otherwise noted for a specific resource study or Exhibit. The 5-mile Study Area encompasses 69,963 acres, inclusive of the 1,471-acre Facility Site.
<b>Towns</b>	The Towns of Burke and Chateaugay, Franklin County, New York.

## **Exhibit 6: Public Health, Safety, and Security**

This Exhibit provides information required in accordance with the requirements of Section 900-2.7 of the Section 94-c Regulations.

### **6(a) Avoidance and Minimization of Potential Adverse Impacts of Facility**

The Applicant has designed the Facility to avoid and/or minimize potential adverse impacts on the environment (as described within Exhibits 3 and 10), public health, and safety during both construction and operation of the Facility. The Applicant worked diligently during the pre-Application study phase to evaluate relevant environmental aspects of the Facility Site and assess potential adverse effects of various construction and operation scenarios. Additionally, the Applicant will adhere to requirements in the Uniform Standards and Conditions (USCs) of Section 94-c during construction and operation of the Facility, which covers many environmental best management practices (BMPs) and standards, which must be adhered to, and which further limit potential for adverse impacts.

Solar energy significantly contributes to the energy planning objectives of New York State's 2015 State Energy Plan (SEP) (amended in April 2020), promotes the objectives of the New York Public Service Commission's (PSC's) adopted Clean Energy Standard, and helps achieve the aggressive renewable goals of the Climate Leadership and Community Protection Act (CLCPA, Exhibit 17). The Facility will have a nameplate capacity of 100-megawatt (MW) alternating current (AC), estimated to generate enough renewable green energy to power approximately 16,500 New York households, thus further reducing New York's dependence on fossil fuels and diversifying the energy market for consumers.

The creation of new solar projects, like this Facility, is imperative to combating climate change. Preventing further climate change requires the reduction in carbon dioxide (CO<sub>2</sub>) emissions, which could be accomplished by rapidly shifting away from fossil fuels to renewable energy projects. Without this shift to renewable energy projects, the effects of climate change may be irreversible, which may result in catastrophic damage across the globe such as temperature increase resulting in ice sheet melt, rising ocean levels, increased wildfires, and other extreme weather events (New York Times, 2021).

The extreme weather that is being fueled by rising global temperatures is impacting economies and societies (United Nations, 2021). Reductions in emissions of CO<sub>2</sub> improve air quality and

can help reverse some of the damage caused by global climate change, which improves long-term public health and safety (Intergovernmental Panel on Climate Change, 2021). Renewable energy projects, like this Facility, are needed to combat climate change and protect the public health and welfare of New York's citizens.

Solar-generated power allows for energy production without the emission of pollutants, resulting in positive effects on air quality and public health. More broadly, solar generation projects contribute toward the State's renewable energy generation goals, which aim to decrease dependence and reliance on greenhouse gas (GHG)-producing fossil fuel facilities.

The Facility is not expected to result in any public health or safety concerns because solar facilities do not pose significant risks to public health and safety. In fact, solar facilities have the potential to improve overall public health and safety through the reduction in CO<sub>2</sub> emissions. While production of fossil fuels results in air emissions that can be detrimental to human health and the environment, solar facilities use the sun's rays to produce clean renewable power without air emissions.

Public health issues associated with the construction of the Facility are limited to typical risks associated with commercial construction projects. While some pollutant emissions are expected during construction of the Facility (through the generation of dust on dry days as well as the use of diesel- and gasoline-powered equipment and vehicles), BMPs will be employed to reduce any impacts associated with these emissions to the extent practicable.

At the local level, the Applicant has developed and will implement a Safety Response Plan and Site Security Plan (Appendices 6-1 and 6-2, respectively) to ensure that any immediate safety concerns at the Facility Site during construction and operation are addressed timely and effectively. This includes coordination and training, as applicable, with the local fire department(s) and emergency responders.

The Applicant has sited the Facility to avoid and/or minimize impacts to sensitive ecological communities and protected wildlife species based on the findings discussed in Exhibits 10 through 14. Where impact avoidance is not possible, the Applicant will mitigate impacts to the greatest extent practicable. The Facility will not produce odor, air or water pollution, and will produce minimal noise throughout Facility's lifetime (as described within Exhibit 2 and Exhibit 7).

In addition, the Applicant will use an anti-reflective coating to reduce the potential for glare impacts to surrounding residences and roadways (as described within Exhibit 8).

The following subsections describe the Applicant's review and evaluation of specific factors related to the environment, public health, and safety, as required by Section 900-2.7:

**(1) *Anticipated Gaseous, Liquid, and Solid Wastes Produced at the Facility During Construction and Operation***

During construction of the Facility, minimal amounts of solid waste, typical of construction projects of this size, are expected to be generated. Dumpsters will be located in construction staging areas for proper disposal of construction-related materials. Waste materials generated during typical construction projects include plastic, wood, cardboard, metal packing materials, construction scrap, debris from blasting, and general refuse, which, if generated, that will be properly disposed at local landfill facilities. Minimal construction material will accrue over the construction phase.

Generation of gaseous and liquid waste will be limited to the operation of equipment during the construction phase. Construction equipment and vehicles will be fueled by unleaded gasoline and ultra-low sulfur diesel and will have maintained mufflers. During operation of the Facility, personnel vehicles will be fueled and maintained offsite; therefore, gaseous and liquid waste generation is not anticipated.

During construction, it is anticipated that 1,770 cubic yards of concrete will be required for the construction of foundation pads for inverters and the collection substation pad. Concrete washout stations located within the Facility Site will collect concrete waste from equipment and prevent concrete from entering stormwater runoff or leaching into soils at the Facility Site. The concrete truck washouts will generate small amounts of waste during construction. The contractor will allow the concrete to harden within the washout facility prior to disposal. In addition, the contractor will be responsible for the removal and disposal of concrete at a licensed facility.

Tree clearing as part of Facility construction will generate vegetative waste. The locations of tree clearing are shown on Sheets PV-C.00.01 through PV-C.00.21 of the Facility Design Drawings in Appendix 5-1. Approximately 46 acres of tree clearing will occur to allow for placement of Facility solar arrays, inverters, haul roads, and collection lines. Additionally, some



tree clearing is required to prevent shading of the panels. Timber and vegetative waste will be handled in accordance with the clearing methods outlined below. The Applicant will coordinate with landowners to salvage merchantable logs and fuel wood. Trees otherwise not claimed by the affected landowner will be cut, logged, and removed to local timber/firewood buyers. To reduce impacts to existing land uses, branch and brush debris and tree stumps will be chipped in place, where necessary, and spread to a maximum depth of 3 inches in upland areas (wood chips may not be stored or disposed of in wetlands, within stream banks, delineated floodways, or active agricultural fields) onsite, so as not to interfere with existing land use practices. Some cleared vegetation will remain in situ. Any wood that is chipped will be used as stabilization in accordance with the Facility's Stormwater Pollution Prevention Plan (SWPPP) in Appendix 13-3 and any other regulatory requirements attached to this Facility. In addition, construction materials, chemicals, debris, waste, shall be managed, handled, and disposed in accordance with the Facility SWPPP. Stumps and other vegetative remnants will be removed and disposed of at an approved Land Clearing Debris landfill site. There is one such facility in Franklin County, which is located 7.4 miles southwest of the Facility Site in the Town of Malone (New York State Department of Environmental Conservation, 2016).

During operation, solar energy technology allows for production of electricity without creating any gaseous, liquid, or solid wastes during operation, and therefore, eliminates the need to treat, collect, transport, and dispose of such waste in any significant amount. Routine activities during operation and maintenance of the Facility may generate small amounts of waste and will be disposed at the appropriate landfill facilities (e.g., cardboard, cleaning rags, and general refuse). Although concrete will be used during construction activities, generation of concrete waste is not anticipated during the operation of the Facility. Routine maintenance of trees and vegetation may result throughout operation of the Facility to prevent shading of the solar arrays due to regrowth of vegetation and to prevent damage to Facility components.

***(2) Anticipated Volumes of Waste to be Released to the Environment at the Facility during Construction and Operation***

No additional volume of waste beyond that addressed in Section 6(a)(1) will be released to the environment by the Facility during construction or operation.

**(3) Treatment Processes to Eliminate or Minimize Waste Released to the Environment**

No treatment process to eliminate or minimize waste will be necessary as no additional volume of waste beyond that addressed in Section 6(a)(1) will be released to the environment by the Facility during construction or operation.

**(4) Collection, Handling, Storage, Transport, and Disposal for Wastes Retained**

Waste collection, handling, storage, transport, and disposal procedures are addressed in Section 6(a)(1).

**(5) Study Area Maps and Analysis**

Figure 6-1 shows the relation of the Facility Site and Study Area (area within a 5-mile buffer of the Facility Site boundary) to the following resources, as applicable and publicly available:

- Public water supply resources (the extent locations are publicly available);
- Community emergency response resources and facilities (including police, fire, and emergency medical response facilities);
- Emergency communications facilities;
- Hospitals and emergency medical facilities;
- Existing known hazard risks (including flood hazard zones and landslide susceptibility);
- Dams, bridges, and related infrastructure;
- Explosive or flammable material transportation or storage facilities; and
- Contaminated sites.

If specific resources are not indicated on Figure 6-1, then none are located within the Study Area for the Facility, and therefore, were not evaluated.

Storm surge zones, areas of coastal erosion hazard, and areas of geologic, geomorphic, or hydrologic hazard (aside from flood hazard) are not applicable to the Facility, as there are none located within the Study Area.

**(6) Significant Impacts on the Environment, Public Health, and Safety**

As indicated in Section (a)(1) through Section (a)(5) of this Exhibit, the Facility is not expected to result in any significant impact on the environment, public health, or safety associated with gaseous, liquid, or solid wastes.

Based on the design measures incorporated into the proposed Facility design, the Facility will not have any adverse short-term, long-term, or cumulative impact on public health or safety. This includes issues surrounding audible sound, low frequency noise, glare, ambient air, potable water, or other quality of life issues. Evaluations of these issues are discussed in respective exhibits.

Based on the weight of scientific evidence of the peer-reviewed literature on solar farms and health, no significant impacts on public health or safety are anticipated from the designed Facility. Public health can be positively influenced as a result of renewable energy technology and its contribution to displace harmful emissions from other fossil fuel generation technologies. The total potential human health benefit depends on the amount of emissions a generation facility is capable of displacing. As discussed within Exhibit 17, the Facility would contribute to a reduction in the amount of fossil fuel consumed, and corresponding reduction of global carbon emissions, which may result in a reduced rise in global ambient air temperature. This reduction in GHG emissions will contribute to improved environmental health overall.

**(7) Proposed Minimization Measures**

The Applicant is committed to minimizing the commitment of resources to the Facility and any potential adverse impacts on the environment, public health, and safety.

The Facility has been designed according to industry standards. The mitigation measures contained in the Application combined with the proposed setbacks will ensure there is no risk to public health and safety, while also serving to minimize annoyance to local residents. The solar arrays are also located on leased private property. Therefore, public access to the Facility is limited.

Compliance with 94-c regulations assures that public and agency comments are solicited and appropriately addressed throughout the development of the Facility. The Applicant intends to comply with the USCs under Subpart 900-6 of the Section 94-c Regulations. The Facility will

comply with applicable federal, state, and substantive local regulations (that are not unreasonably burdensome – see Exhibit 24) pertaining to the construction and operation of the proposed Facility. Compliance will also serve to decrease the possibility of adverse impacts. Construction activities and Facility engineering will be undertaken in compliance with applicable State and substantive local building codes (that are not unreasonably burdensome), and Federal Occupational Safety and Health Administration (OSHA) guidelines in order to protect the safety of workers and the public. The implementation of a State-approved State Pollutant Discharge Elimination System (SPDES) permit for construction-related stormwater runoff will protect all water resources. The Spill Prevention, Containment and Control (SPC) Plan will protect against inadvertent spills during construction and operation and will be submitted as a pre-construction Compliance Filing. Road use and repair and traffic control will be coordinated at the local level, to assure that the safety of construction staff and of the public is maintained. The Applicant will also coordinate at the local level to reduce congestion and assure that damage to roadways in the area is avoided, minimized, or repaired through a Road Use Agreement (RUA) to be negotiated with the Towns.

### ***(8) Proposed Mitigation Measures***

As discussed previously in this Exhibit, potential impacts to public health and safety are minimal and no mitigation measures are required.

No mitigation measures are proposed to the following resources that have been located within the Study Area, as the Facility Site will have no significant impact on them:

- Public water supply resources (to the extent locations are publicly available);
- Community emergency response resources and facilities (including police, fire, and emergency medical response facilities);
- Emergency communications facilities;
- Hospitals and emergency medical facilities;
- Existing known hazard risks including flood hazard zones and landslide susceptibility;
- Dams, bridges, and related infrastructure;
- Explosive or flammable materials transportation or storage facilities; and
- Contaminated sites.

**(9) Proposed Impact Monitoring**

The Applicant will provide a Complaint Management Plan as a pre-construction compliance filing per Section 900-10.2. The objective of this plan is to establish a consistent method and procedure by which the Applicant will address public complaints during the construction and operation of the Facility. The Complaint Management Plan outlines the numerous ways an individual can file a complaint, how the Applicant will investigate and attempt to resolve the complaint, and dispute resolution procedure. Section 6(c) of this Exhibit addresses emergency response and contingency plans.

In accordance with the USCs in the Section 94-c Regulations, the Applicant will provide funding for an environmental monitor to oversee Facility construction and restoration activities.

**6(b) Preliminary Plan for Site Security during Operation of the Facility**

The Applicant has provided a Site Security Plan for the operation of the Facility as Appendix 6-2, including site plans and descriptions of the following site security features.

**(1) Access Controls**

Facility components will be enclosed with a chain-link fence during both construction and operation of the Facility. The site will be accessible to Facility personnel, including construction contractors, via multiple locked gates. Gates will be outfitted with a KnoxBox locking system (or similar) to allow Facility access by emergency personnel. Additional access controls are not anticipated for the Facility. Gates will be locked unless AES or authorized personnel are onsite. Additionally, office trailers will remain locked during non-working hours. Details on fencing and gates is included in the Design Drawings in Appendix 5-1 of this Application.

Signage will be posted at access points and incrementally along the fenced perimeter. The signage will warn of no trespassing as well as provide safety information. The Applicant will address the need for additional access controls, as needed.

**(2) Electronic Security and Surveillance Facilities**

Electronic security or surveillance facilities are not anticipated to be required during construction. All site personnel, contractors, and visitors to the site will be required to check-in at

the main construction operations office or trailer in order for the Applicant to keep a record of visitors.

A security camera and monitoring system will be used at the collection substation for additional security during operation of the Facility. Surveillance monitoring will occur 24 hours a day and live monitoring will be conducted by the AES Control Center located in Salt Lake City, Utah. When unanticipated activity is detected outside working hours, the AES Control Center will call the Operations and Maintenance (O&M) Manager or designee, and the local Sheriff's department/emergency services. Daily reports will be maintained by the AES Control Center for all site activity.

### ***(3) Security Lighting***

The Facility will use manually operated exterior lighting as necessary during operation of the Facility. Security lighting will be installed only at the collection substation. The lighting will be strategically placed around the substation to emphasize worker safety during operation of the Facility. The Design Drawings in Appendix 5-1 detail the lighting plan and specifications. Security lighting will be maintained at the minimum levels needed to accomplish the associated task and will only be used when necessary to avoid offsite trespass. Visual disturbances to adjacent landowners will be minimized by the strategic lighting placement and limited lighting use, while providing adequate security for the Facility.

Electricity for the security lights will be provided from the station service power and from a distribution line from the local utility for emergency backup power. Full cut-off fixtures and task lighting will be used at the substation where feasible, as specified on the lighting plans. The majority of Facility construction work will be conducted during daylight hours. If lighting is needed for specific tasks, temporary manually operated lighting will be brought in and will only be used during active work periods in specific locations. No security lighting is proposed for the Facility during non-construction work hours.

### ***(4) Lighting of Facility Components to Ensure Aircraft Safety***

Based on the finding of the Federal Aviation Administration (FAA) Notice Criteria Tool, the proposed Facility does not trigger the need to consult with the FAA.

Components greater than 200 feet in height are not proposed for the Facility; therefore, aircraft obstruction lighting is not applicable, and the Facility will not compromise aircraft safety.

### **(5) *Cyber Security Program***

Protection of digital computer and communication systems demonstrating compliance with the Federal Department of Commerce's National Institute of Standards and Technology, the North American Electric Reliability Corporation (NERC), and/or International Organization for Standardization will be used by the Applicant. Compliance with applicable standards will be periodically validated by an independent auditor.

Notification of a cyber security-related emergency may come from an outside source, or any of the following sources:

- A business partner or manager;
- A system page or email alert to an administrator or the Operator;
- Release of an awareness notification from the Operator;
- Corporate Security or the Information Management Support Center; and
- A Business Unit designated to be contacted by a source outside the First Responder.

If a cyber security-related emergency is discovered, the Immediate Supervisor, Corporate Security, Operator, Local Emergency Services, and/or the Transmission System Operator will be notified, as appropriate. Cyber assets will be restored to normal operations by reloading data from backup tapes, reinstalling cyber assets from their original distribution media, or other means. The assets, once restored, will be tested to ensure they will function correctly and not be affected by the same issues or vulnerability once they are placed back in production. Evacuation of the Site is not likely to be necessary during these situations, but the Site Manager will determine whether that is appropriate.

### **6(c) Safety Response Plan**

The Applicant has provided a Safety Response Plan (Appendix 6-1) to ensure the safety and security of the local community, including descriptions of the following:

1. Contingencies that would constitute a safety or security emergency;

2. Emergency response measures by contingency;
3. Evacuation control measures by contingency;
4. Community notification procedures by contingency;
5. Onsite equipment and systems to prevent or handle fire emergencies and hazardous substance incidents;
6. Contingency plans to be implemented in response to the occurrence of a fire emergency or a hazardous substance incident; and
7. Annual local emergency response organization training.

#### **6(d) Coordination with New York State Division of Homeland Security and Emergency Services**

The Applicant has provided a copy of Safety Response Plan and Site Security Plan to the New York State Division of Homeland Security and Emergency Services, along with a request for review and comment on these plans on January 28, 2022. This correspondence is included as Appendix 6-3. The Applicant also consulted with local emergency service providers, including the Towns' local fire departments, to inform them of the potential Facility, seek input regarding the Safety Response Plan, and answer questions. The Applicant met with representatives from the Burke Volunteer Fire Department and the Chateaugay Fire Company on February 1, 2022 and provided a copy of the plan required in Section 6(c) of this Exhibit and requested that they review the plan to provide comments and ask questions. The Applicant will continue to coordinate with these departments as the project progresses.

#### **6(e) Plans Provided to Local Office of Emergency Management for Cities with a Population Over One Million**

The Facility is not to be located within any part of a city with a population over one million.

### **Conclusions**

The construction of the Facility will not result in any public health, safety, or security concerns. This is due to the fact that solar projects do not generate fuel emissions during operation, unlike fossil fuel power plants. There will be minor vehicle emissions and airborne dust during construction, which is typical of construction of these types of projects, but these will both be



minimized through the use of BMPs. In addition, Site Security and Safety Response Plans have been prepared and will be adhered to for the Facility. These have been provided to the Burke Volunteer Fire Department and the Chateaugay Fire Company as well as the U.S. Department of Defense. The Facility has been designed to comply with 19 New York Codes, Rules and Regulations (NYCRR) Section 900-2.7 and the USCs and impacts related to public health, safety, and security have been avoided and minimized to the maximum extent practicable.

## References

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