COMMONWEALTH OF KENTUCKY
BEFORE THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING

In the Matter of:

ELECTRONIC APPLICATION OF EXIE SOLAR, LLC FOR A CERTIFICATE OF CONSTRUCTION FOR AN APPROXIMATELY 110 MEGAWATT MERCHANT ELECTRIC SOLAR GENERATING FACILITY AND NONREGULATED ELECTRIC TRANSMISSION LINE IN GREEN COUNTY, KENTUCKY	)	Case No. 2025-00151

MOTION FOR DEVIATION FROM SETBACK REQUIREMENTS

Exie Solar, LLC ("Applicant" or "Exie"), by and through counsel, pursuant to KRS 278.704(4), moves the Kentucky State Board on Electric Generation and Transmission Siting ("Siting Board" or "Board") for a deviation from the setback requirements in KRS 278.704(2). Specifically, Exie seeks a deviation from the 2,000-foot setback requirement in KRS 278.704(2) to allow it to place generating equipment no closer than 1,950 feet from the nearest residential neighborhood. In support of this Motion, Exie respectfully states as follows:

I. INTRODUCTION

On August 8, 2025, Exie filed an application for a Certificate to Construct ("Application") an approximately 110 megawatt utility-scale solar-powered merchant electric generating facility and nonregulated electric transmission line located in unincorporated Green County, Kentucky (the "Project").

As described in the Application, the Project will be situated on approximately 1,340 acres of land historically used for agriculture fields with scattered rural homesteads and residential properties. Green County does not have a local planning commission and has not established local zoning. As such, the Project will not be subject to local zoning regulations.

II. THE 2,000 FOOT SETBACK REQUIREMENT

In relevant part, KRS 278.704(2) establishes setback requirements for merchant electric generating facilities as follows:

> Except as provided in subsections (3), (4), and (5) of this section, no construction certificate shall be issued to construct a merchant electric generating facility unless the exhaust stack of the proposed facility and any wind turbine is at least one thousand (1,000) feet from the property boundary of any adjoining property owner and all proposed structures or facilities used for generation of electricity are two thousand (2,000) feet from any residential neighborhood, school, hospital, or nursing home facility.

Without a deviation, all substations, panels, and inverters—the proposed structures or facilities used for the generation of electricity—must be located more than 2,000 feet from any residential neighborhood, school, hospital, or nursing home facility. There are no schools, hospitals, or nursing home facilities within 2,000 feet of these structures in the proposed Project layout.

Per KRS 278.700(6), a "residential neighborhood" is "a populated area of five (5) or more acres containing at least one (1) residential structure per acre." The following residential neighborhood is within 2,000 feet of a solar panel, as measured from the nearest edge of the residential structure to the nearest Project component:[1]

Neighborhood	Distance to Panel (ft)	Distance to Inverters (ft)	Distance to Substation (ft)
SR 218	1,951	2,260	7,804

[1] In its Application materials, Exie Solar indicated that it would seek a deviation from 2 residential neighborhoods. While the neighborhood along Liletown Road depicted along the northwest side of the 2,000 ft. radius from the project boundary in App. Exh. A appeared to qualify, upon further investigation, its nearest home is farther than 2,000 feet from panels and other equipment/facilities and no deviation will therefore be required:

Neighborhood	Distance to Panel (ft)	Distance to Inverters (ft)	Distance to Substation (ft)
Liletown Rd.	2,010	2,930	7,005

The SR 218 residential neighborhood is located in the northern portion of the Project site as identified in Application Exhibit A and reproduced below as Figure 1.

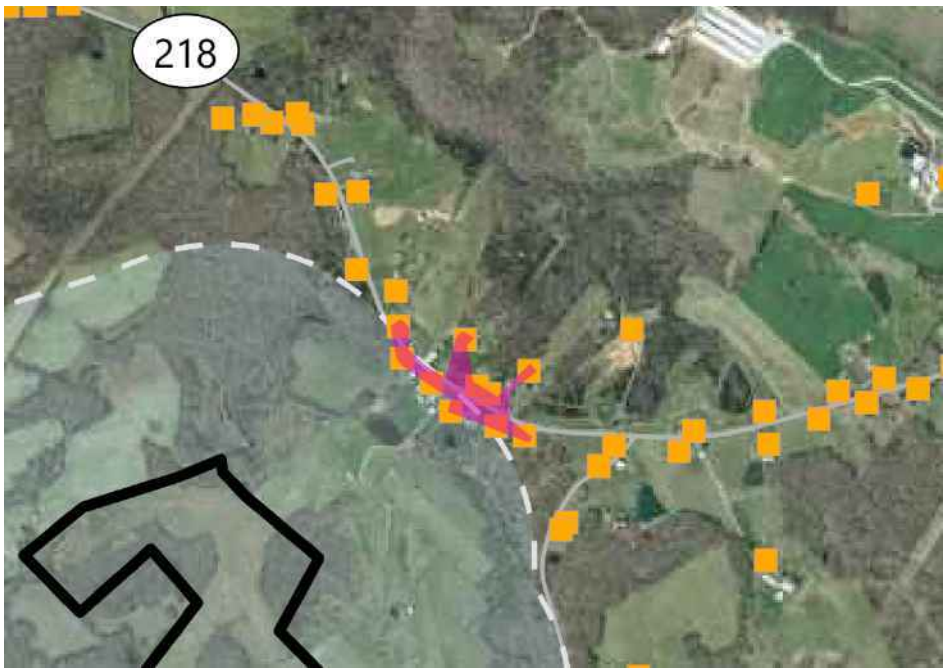


Figure 1. SR 218 Residential Neighborhood

There are no other clusters of residences that meet the statutory definition of residential neighborhood and are within 2,000 feet of the identified Project structures. Because the Project will not be subject to local zoning regulations, it will be subject to statutory setback requirements in KRS 278.704(3) and permitted to seek deviation from those requirements pursuant to KRS 278.704(4).

III. DEVIATION FROM SETBACK REQUIREMENTS

The Siting Board, pursuant to KRS 278.704(4), may grant a deviation from the 2,000-foot setback requirement in KRS 278.704(2) if "the proposed facility is designed to and, as located, would meet the goals of KRS 224.10-280, 278.010, 278.212, 278.214, 278.216, 278.218, and 278.700 to 278.716 at a distance closer than those provided in subsection (2) of this section." The Board has previously stated that the purpose of the setback requirements in KRS 278.704(2) is to

protect property owners from the adverse impacts that might result from the construction of merchant electric generation facilities.[2]

With that in mind, the Project has been designed to minimize any adverse impacts on residential neighborhoods that might result from construction of the Project. Additionally, the Project has been designed to and will meet the goals of the statutes referenced in KRS 278.704(4). Thus, deviation from the setback requirements in KRS 278.704(2) is appropriate.

IV. DISCUSSION

A. The Project Meets the Goals for Setbacks Identified in KRS 278.704(4)

The Project was designed with the goals of KRS 224.10-280, 278.010, 278.212, 278.214, 278.716, 278.718, and 278.700 to 278.716 in mind, and if constructed, will meet those goals as required by KRS 278.704(4).

1. KRS 224.10-280

KRS 224.10-280 provides that, prior to constructing a facility to be used for the generation of electricity, a developer must submit a cumulative environmental assessment (CEA) to the Energy and Environment Cabinet and pay a fee set pursuant to KRS 224.10-100(2). A CEA has been prepared and attached hereto, with the results therein provided below. The CEA demonstrates that the Project will have limited environmental impact. There have been no regulations promulgated establishing a fee to defray the costs of processing the CEA. As such, no CEA fee is paid.

[2] *In the Matter of Application of ecoPower Generation-Hazard, LLC for a Certificate to Construct and Operate a Merchant Electric Generating Facility and a 69KV Transmission Line in Perry County, Kentucky* (the "ecoPower Order") at 32-33, Case No. 2009-00530 (Ky. P.S.C. May 18, 2010).

a. Air Evaluation (KRS 224.10-280(3)(a))

As required by KRS 224.10-280(3)(a), the CEA evaluates the air pollutants to be emitted by the facility and the associated control measures. Solar facilities do not produce any emissions during operation. As such, the Project is not anticipated to produce any air emissions. The CEA describes the estimated emissions during commission. Indirect air emissions from the Project would occur during construction from operation of construction equipment, worker personnel vehicles, and equipment and supply deliveries. These will be mitigated by maintaining the vehicles in good working condition. There also may be fugitive dust from construction activities and vehicle operation, but these will be mitigated by using best management practices for dust control. The CEA describes the air pollution mitigation measures during both construction and operation of the Project. No air emissions permit is required for the Project.

b. Water Evaluation (KRS 224.10-280(3)(b))

KRS 224.10-280(3)(b) requires that the CEA describe the type and quantity of water pollutants that will be discharged to the Waters of the Commonwealth, and the methods that will be used to control those discharges. Site grading and construction activities will be the most likely source of surface water pollutants from the Project. The Project will minimize grading and excavating by incorporating existing topography into the layout to the extent possible, and will add only small areas of impervious surface in the form of graveled access roads and gravel pads or small concrete foundations to accommodate certain areas of the project. Exie will conduct Project construction activities under the coverage of the Kentucky Pollutant Discharge Elimination System (KPDES) permit for Stormwater Discharges Associated with Construction Activities ("KYR10 Permit"). The KYR10 Permit requires Exie to develop and implement a stormwater pollution prevention plan (SWPPP) which will identify best management practices (BMPs), such

as silt fences, sediment basins, and buffer zones, that will be followed to minimize impacts associated with construction. Measurable impacts on the quality of surrounding water resources are not anticipated.

The Project will store small quantities of petroleum fuels, lubricants, and fluids. These will be stored in double-wall containment vessels or within a secondary containment system. Exie will implement best management practices to minimize the impacts of any spills on groundwater or surface water per a planned spill prevention, control, and countermeasure (SPCC) plan.

c. Waste Evaluation (KRS 224.10-280(3)(c))

As required by KRS 224.10-280(3)(c), the CEA evaluates the waste to be generated by the facility and the associated control measures. Waste generated during construction activities would include wooden crates, pallets, cardboard boxes, and other packaging material. Where practical, construction waste material will be recycled and any material that cannot be recycled will be disposed offsite at a permitted facility. Trash and other solid waste generated during operation will also be disposed offsite at a permitted facility. Any waste generated during construction activities will be handled, managed, and disposed of in accordance with federal, state, and local regulations. Except for cleared woody vegetation, which may be chipped and mulched on site, all waste materials will be disposed of offsite. Waste fluids from construction equipment maintenance activities will be stored in appropriate containers, with secondary containment as needed, for disposal by a licensed contractor. Finally, portable toilets will be provided for construction workers and will be maintained by the contractor supplying the toilet facilities.

During operation, waste materials will be stored temporarily onsite and recycled or disposed of on a regular basis at an appropriate permitted facility.

d. Water Withdrawal Evaluation (KRS 224.10-280(3)(d))

As required by KRS 224.10-280(3)(d), the CEA identifies the source and volume of anticipated water withdrawal needed to support facility construction and operations, and the CEA describes the methods to be used for managing water usage and withdrawal. As described in the CEA, water will be obtained from several potential sources, including an on or offsite groundwater well, or trucked from an offsite water purveyor. Water use related to construction activities would include site preparation such as dust control and grading activities.

Solar electricity operation is not a water-intensive process. Rainfall in the region will suffice to remove dust and other debris from the PV panels, and will be sufficient for vegetation management needs once plantings are established. In summary, the Project is designed and located to meet the goals of KRS 224.10-280.

2. KRS 278.010

KRS 278.010 provides a list of definitions to be used in conjunction with KRS 278.010 to 278.450, 278.541 to 278.544, 278.546 to 278.5462, and 278.990. The Board's authority begins with KRS 278.700 and extends through KRS 278.716 and any applicable provision of KRS 278.990. In filing a complete application pursuant to the applicable statutes in this proceeding, Exie has satisfied the goal of providing the required information utilizing the definition of any applicable term defined in KRS 278.010.

3. KRS 278.212

KRS 278.212 requires the filing of plans for electrical interconnection with a merchant electric generating facility and costs of upgrading the existing grid. Exie has met the goals of KRS 278.212 because the Project will comply with all applicable conditions relating to electrical interconnection with utilities by following the East Kentucky Power Cooperative (EKPC)

interconnection process. Additionally, Exie will accept responsibility for appropriate costs which may result from its interconnecting with the electricity transmission grid. With the Applicant's commitment to comply with KRS 278.212, the proposed facility has been designed and located to meet the goals of KRS 278.212.

4. KRS 278.214

KRS 278.214 establishes a curtailment priority for utilities or cooperatives that provide transmission service in the event that an emergency on its transmission facilities require curtailment. Exie will abide by the requirements of this provision to the extent that these requirements are applicable. By committing to comply with these requirements Exie has met the goals anticipated by KRS 278.214.

5. KRS 278.216

KRS 278.216 requires a jurisdictional utility, as defined by KRS 278.010(3), to comply with many of the requirements that are included within KRS 278.700 to 278.716, including the submission of a site assessment report. However, Exie is not a jurisdictional utility. Therefore, by complying with the requirements of KRS 278.700 *et seq.*, Exie has met the requirements and goals of KRS 278.216.

6. KRS 278.218

KRS 278.218 requires approval by the Public Service Commission for change in ownership or control of assets owned by a utility. Exie is not a utility as described in KRS 278.010(3), and therefore this statute does not apply to Exie. However, to the extent Siting Board approval may at some time be required for change of ownership or control of assets owned by Exie, Exie will abide by the applicable rules and regulations which govern its operation.

7. KRS 278.700 to KRS 278.716

KRS 278.700 to KRS 278.716 are the statutory provisions governing the application for and grant of construction certificates to merchant electric generating facilities. The Board has described the goals of these provisions as ensuring the proposed facility will be constructed and operated in a way that will not intrude upon or unnecessarily disrupt other surrounding land uses including hospitals, nursing homes, residential areas, schools, and parks, or otherwise have adverse environmental impacts which are not otherwise regulated.

Exie's application includes an evaluation of the issues required by KRS 278.700 to KRS 278.716. Moreover, the Applicant has designed the Project to ensure that, through Project layout and other mitigation measures, it will not intrude on or otherwise disrupt its neighboring landowners. The Project meets the goals of KRS 278.700 to KRS 278.716.

B. The Project's Impact on Residential Neighborhoods will be Minimal.

Exie has designed the Project to minimize impacts on the environment and the neighboring community. The Site Assessment Report (SAR), required by KRS 278.708 and included as Exhibit I to Exie's application, describes the Project's anticipated noise, visual, and traffic impacts.

1. Noise Impacts

SAR Attachment D includes an evaluation of the anticipated noise impacts of Project construction and operation ("Noise Assessment Report"). The Noise Assessment Report considered existing sources of noise at the Project site, noise impacts from Project construction, and noise impacts from Project operations.

a. Noise During Construction

The Project area has historically been used for agricultural and forestry purposes and the Project parcels are predominately bordered by agricultural farmland with scattered rural

homesteads and residential properties. It is anticipated that noise-producing construction activities during Project construction will include use of a rock drill and solar post pile driver for solar array panel racking, as well as site preparation activities involving grading.

The Noise Assessment Report identifies multiple pieces of construction equipment that may be utilized during Project construction, the loudest of which is rock drill that could be used to predrill the holes prior to pile driving or installation of screw anchors to affix piles to foundations for solar panel racking. The National Cooperative Highway Research Program describes the typical noise level of a rock drill as 95 decibels ("dB") at 50 feet and the typical noise level of a solar post pile driver 92 dB at 50 feet.[3]

Based on current site plans, all sensitive noise receptors located in residential neighborhoods are greater than 1,950 feet away from the nearest solar panel; this is also the nearest location where the rock drill, if used, would operate. Moreover, the noise from construction activities will be limited in duration and will generally occur only during daylight hours. Given the Project's proposed setback distances and timing of construction activities, noise from construction equipment will not result in long-term negative impacts to neighboring landowners.

In addition to noise from construction equipment, construction of the Project will result in a temporary increase in truck traffic. The Noise Assessment Report evaluated the potential noise impact from heavy trucks operating in the Project's vicinity and found that the closest residents would experience only a temporary impact from construction-related truck noise.

b. Noise During Operation

Noise during operations will be minimal as the Project will employ a fixed-tilt racking system and thus no tracking motors for Project solar panel racking will be used. The panels will

[3] *National Cooperative Highway Research Program 25-49, Development of a Highway Construction Noise Prediction Model, 2018.*

therefore not emit noise during operation. Based on the current site layout, the noise levels generated from Project inverters and substation at the nearest nonparticipating residential receptor would be 37 dBA during the day and 26 dBA at night, comparable to normal breathing or whispers. The highest anticipated sound levels at the Project boundary would occur near the substation, where the highest projected sound level is 48 dBA during the day and 44 dBA at night, equivalent to a quiet office. Thus, operation of equipment would not be a significant contributor of noise.

2. Visual Impacts

Viewshed impacts to residences in the surrounding area are expected to be minimal, if any. *See* SAR, Application Exhibit I. Use of low-profile PV panels, agricultural-style perimeter fencing to blend with the surrounding setting, and additional vegetative screening will further reduce the potential visibility of the Project. As more fully reported in the SAR and the Glare Assessment in its Attachment F, red glare is not predicted at any of the Project's assessed viewpoints. The Applicant has submitted a conceptual visual mitigation strategy and series of Visual Impact Illustrations that demonstrate the Project will be compatible with the area's scenic surroundings, with limited portions being momentarily visible due to the area's rolling terrain and vegetation. *See*, SAR Attachment E, Visual Resource Assessment, and SAR Attachment G, Visual Mitigation Report.

3. Traffic Impacts

SAR Attachment H contains the Applicant's Route Evaluation Study ("Route Evaluation"), and provides the analysis of traffic impact during both the construction and operation phases of the proposed facility. The Project will have 18 functional access points; however, the number of workers and the associated construction and delivery truck trips expected during the construction of the Project is not anticipated to adversely impact traffic on these adjoining roads.

As operation of the Project will require few daily onsite personnel, the additional volume of daily traffic will have no measurable impact on traffic or transportation infrastructure.

4. Exie's Mitigation Efforts

Exie has worked diligently to protect neighboring property owners from adverse impacts that may result from the construction and operation of the facility. Exie performed extensive outreach to both the community at large and the neighboring property owners to ensure that neighbors were well-informed about the Project and could share any concerns regarding the impact of the Project. As part of its Application, Exie identified those mitigation measures that would address certain impacts of the Project. As discussed in the Application and SAR, along with accompanying reports, the Project will not produce any emissions, only a negligible amount of noise once constructed, and it will have minimal visual impacts.

V. CONCLUSION

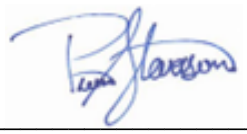
Exie Solar, LLC has designed the Project to protect the residents of adjacent residential neighborhoods from any potentially adverse impacts of the Project. The proposed mitigation measures will protect residents in the residential neighborhood from any adverse impact that may result from the proposed Project being located closer than 2,000 feet. Additionally, the Project meets the goals of the statutory provisions listed in KRS 278.704(4).

VI. PRAYER FOR RELIEF

Wherefore, because the proposed Project is designed to and, as located, would meet the goals of KRS 224.10-280, 278.010, 278.212, 278.214, 278.216, 278.218, and 278.700 to 278.716 at a distance closer to residential neighborhoods than 2,000 feet, Exie Solar, LLC respectfully requests a ruling from the Board that:

1. grants the Project a deviation from the 2,000-foot setback requirement in KRS 278.704(2); and
2. authorize Exie to place generating equipment 1,950 feet from the relevant residential neighborhood.

Respectfully submitted,



Kathryn A. Eckert
Gregory T. Dutton
Pierce T. Stevenson
FROST BROWN TODD LLP
400 W. Market Street, 32nd Floor
Louisville, KY 40202
(502) 589-5400
(502) 581-1087 (fax)
keckert@fbtlaw.com
gdutton@fbtlaw.com
pstevenson@fbtlaw.com
Counsel for Exie Solar, LLC

Cumulative Environmental Assessment

Exie Solar Project

Green County, Kentucky

Case No. 2025-00151

Prepared for:

Exie Solar, LLC
8400 Normandale Lake Blvd, Suite 1200
Bloomington, MN 55437
Contact: Courtney Whitworth
Tel: 270.949.8123

Prepared by:

Environmental Design & Research,
Landscape Architecture, Engineering & Environmental Services, D.P.C.
5 E Long Street, Suite 700
Columbus, OH 43215
edrdpc.com

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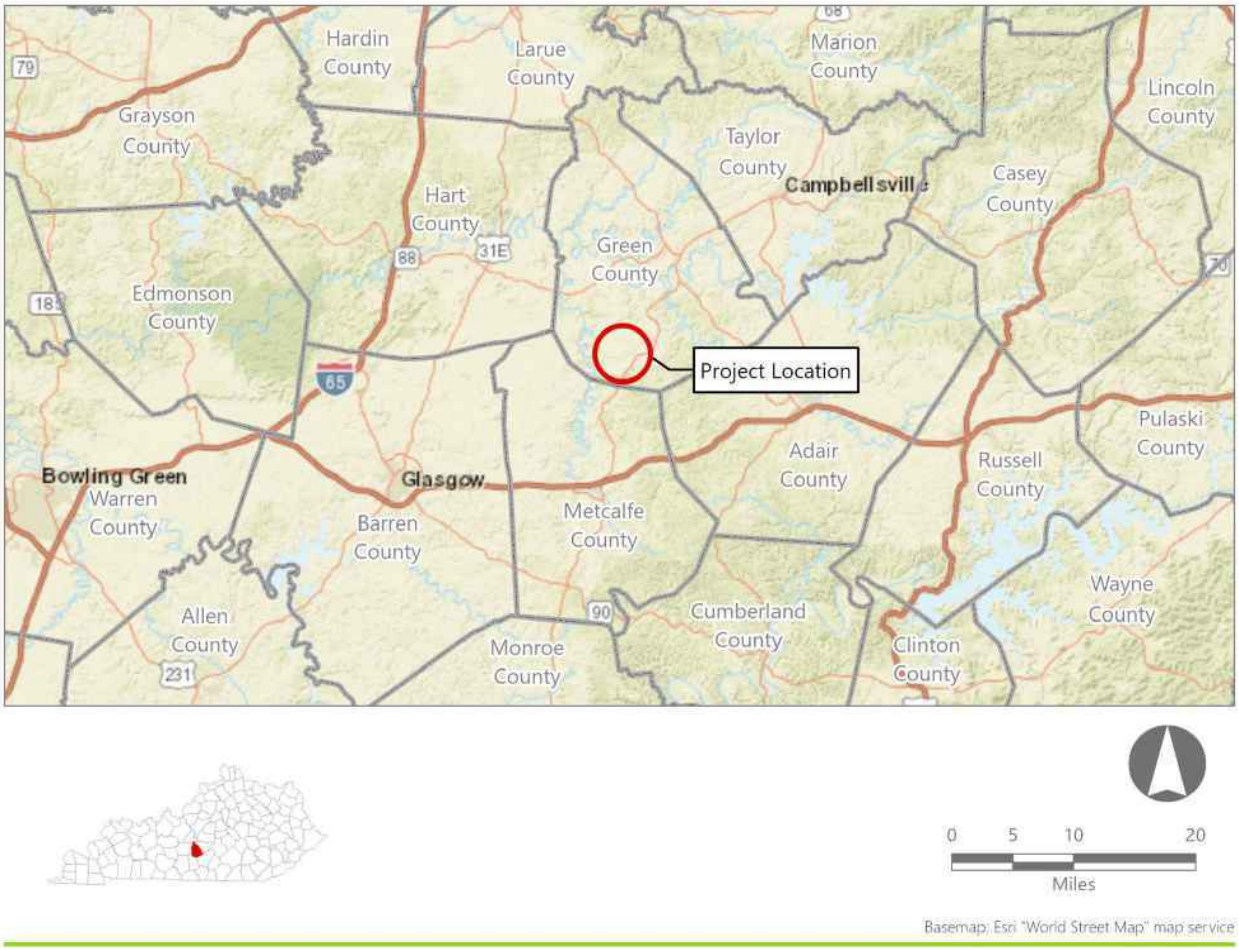
1.0 INTRODUCTION

Exie Solar, LLC (Exie Solar or the Applicant) is proposing to construct the Exie Solar Project (the Project), an up to 110-megawatt (MW) solar-powered electric generation facility in Green County, Kentucky. As shown in Figure 1, the Project is proposed to be located in the southwestern portion of Green County. The area leased or purchased for the Project includes 1,340 acres of private land (the Project Area).

Figure 1. Project Location



The facility will consist of the fence line, photovoltaic (PV) panel arrays, electrical collection lines, inverters, transformers, access roads, battery energy storage system (BESS), facility substation, switchyard, a generation interconnection transmission line connecting the substation and switchyard to an existing transmission line, an operations and maintenance (O&M) building and storage area, and temporary laydown yards. The facility will deliver power to a single point of

interconnection (POI) on the existing Green County-Summer Shade 161-kilovolt (kV) transmission line, owned by the East Kentucky Power Cooperative (EKPC). The total generating capacity of the facility will not exceed 110 MW of alternating current (AC). As required by KRS 278.704(1), the Applicant is submitting an application for a construction certificate for a merchant electric generating facility for the Project to the Kentucky State Board on Electric Generation and Transmission Siting. The case number for the application is 2025-00151.

Pursuant to the requirements of Kentucky Revised Statutes (KRS) 224.10-280, "no person shall commence to construct a facility to be used for the generation of electricity unless the person submits a cumulative environmental assessment to the cabinet with the permit application." On behalf of the Applicant, Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR) has prepared this *Cumulative Environmental Assessment* (CEA) for submission to the Kentucky Energy and Environment Cabinet (KEEC). Paragraph (3) of KRS 224.10-280 provides that a CEA should contain a description, with analytical support, of the following topics, which are discussed in this report:

(a) Air pollutants
    1. Types and quantities of air pollutants that will be emitted from the facility
    2. A description of the methods to be used to control those emissions
(b) Water Pollutants
    1. Types and quantities of water pollutants that will be discharged from the facility into the waters of the Commonwealth
    2. A description of the methods to be used to control those discharges
(c) Wastes
    1. Types and quantities of wastes that will be generated by the facility
    2. A description of the methods to be used to manage and dispose of such wastes
(d) Water Withdrawal
    1. Identification of the source and volume of anticipated water withdrawal needed to support facility construction and operations
    2. A description of the methods to be used for managing water usage and withdrawal

2.0 AIR POLLUTANTS

Because solar-powered electric generation facilities generate electricity by the direct conversion of sunlight to electricity, there will be no air emissions resulting from the operation of the facility components. As such, operation of the facility will not require any air emission permits.

Air pollutants emitted during construction of the facility will largely be due to emissions associated with the operation of vehicles and construction equipment, which are typically powered by internal combustion engines. Additional vehicle emissions during construction will be associated with occasional equipment deliveries and maintenance activities. Anticipated emissions will be minimized by maintaining construction and transportation vehicles in good operating condition.

In addition to vehicle and equipment emissions, construction activities and vehicle operation could result in the release of fugitive dust. Fugitive dust consists of small, lightweight particles that remain suspended in the air for a relatively brief period and often originates from areas containing exposed soil (e.g., unpaved roads, cultivated fields). Fugitive dust will be minimized by using best management practices such as requiring reduced vehicle speeds, applying gravel to heavily travelled internal roadways, applying water or a dust suppressant where needed, and conducting seeding and stabilization in areas where construction activities have been completed or suspended. During facility operation, fugitive dust emissions will be minimized by maintaining low-growing vegetation and limiting travel through the site to the graveled access roads to the extent possible. Overall impacts associated with fugitive dust are anticipated to be minimal.

3.0 WATER POLLUTANTS

The facility will not discharge effluent water or waste into streams or waterbodies, nor will facility operation require the use of significant amounts of water. The facility will add only small areas of impervious surface in the form of graveled access roads and gravel pads and/or small concrete foundations to accommodate inverters, the O&M building, the substation and switchyard, and the BESS. These small areas will have a negligible impact on surface water runoff and groundwater recharge and will be managed through appropriate stormwater controls. Therefore, measurable impacts on the quality of surrounding water resources are not anticipated. Surface water and groundwater resources near the Project Area, potential impacts to these resources, and methods to avoid, minimize, and mitigate these impacts are discussed further below.

3.1 Surface Water

The majority of the Project Area is located within the Greasy Creek–Little Barren River watershed (hydrologic unit code [HUC] 051100010608). The southernmost portion of the Project Area falls within the Adams Creek–East Fork Little Barren River watershed (HUC 051100010604). The KEEC provides information on Kentucky's designated special-use waters. These are waters that are listed in the KAR as being worthy of additional protection. A review of the Kentucky Special Waters online mapping showed that there are no special use waters within the Project Area. The nearest special-use water is Russell Creek, located approximately 4 miles east of the Project Area. Russell Creek flows north until its confluence with the Green River, approximately 6 miles northeast of the Project Area. This stream is listed as an Outstanding National Resource Water (ONRW), meaning that it holds ecological significance and has protection against degradation (KEEC, Division of Water 2025).

A portion of the Project Area, corresponding with Greasy Creek, is mapped by the Federal Emergency Management Agency as a Special Flood Hazard Area (SFHA) with a 1% annual chance of flooding (100-year floodplain). The SFHA is largely avoided in the Project layout, with the exception of two access roads that cross Greasy Creek within the SFHA. Exie Solar will obtain the proper state and county approvals and permits to avoid and minimize potential impacts related to access roads within the SFHA.

A wetland and stream delineation was conducted within the Project Area in November 2024. A total of 38 wetlands and 42 streams were identified and delineated within the Project Area. Wetland community types observed included five palustrine emergent wetlands, five palustrine forested wetlands, three palustrine scrub-shrub wetlands, and 25 palustrine unconsolidated bottom wetlands. Wetlands ranged in size from 0.01 to 2.77 acres. Three perennial, 8 intermittent, and 31 ephemeral streams totaling 31,683 linear feet were delineated within the Project Area. Two of the perennial streams correspond with the mapped stream Greasy Creek, while one perennial stream is an unnamed tributary to Greasy Creek.

The preliminary site plan avoids all impacts to waters of the United States (WOTUS) and waters of the Commonwealth with the exception of three access road crossings, one at Greasy Creek and two at an unnamed tributary of Greasy Creek. Outside of these three crossing locations, there will be a 25-foot buffer between Project components and wetlands and streams. All necessary permits will be obtained for stream crossing impacts.

Impacts to surface waters during construction will be minimized through coverage under the Kentucky Pollutant Discharge Elimination System (KPDES) general construction permit KYR10, issued by the Kentucky Division of Water (DOW). General construction permit KYR10 authorizes the discharge of stormwater pollutants for construction activities with one or more acres of land disturbance. A Notice of Intent for coverage under KYR10 will be submitted to the DOW at least seven days prior to the commencement of construction activities. Construction-related impacts to surface waters will be minimized through adherence to a Stormwater Pollution Prevention Plan (SWPPP), developed pursuant to the requirements of KYR10. Upon completion of construction activities and achievement of final stabilization, the Applicant will submit a Notice of Termination to the DOW.

Herbicides will be used as needed to control unwanted vegetation during construction. Widespread use of herbicide is not anticipated, and herbicide use in proximity to surface waters will be limited to the greatest extent practicable. Herbicide and pesticide use must be performed by qualified, commercially licensed applicators in compliance with state and federal requirements governing use, distribution, and record-keeping for all phases of vegetation management. This

record-keeping will also allow the contractor and/or the Applicant to evaluate the success of treatment and improve the effectiveness of future applications.

3.2 Groundwater

Information obtained from the KEEC shows that the aquifers throughout central Kentucky, including those in Green County, generally consist of karst and localized fracture aquifers. Karst aquifers are created when water passes over and dissolves rock material, forming fractures. Over time, these fractures can deepen and develop caves and underground streams. Karst aquifers are often fed by groundwater and can surface as sinkholes, springs, and caves (KEEC 2025). The Project does not anticipate any impacts to groundwater resources.

Based on information derived from the Kentucky Geoportal (Kentucky Geography Network 2025), there is one mapped water well located within the Project Area. This well's status is listed as "other," so it is possible that it has previously been sealed or is otherwise no longer functional. The Kentucky Geoportal showed no mapped springs within the Project Area; however, there are several sinkholes. These sinkholes were mapped during the surface water delineation effort and are avoided by facility components.

Construction activities will involve equipment that is powered by petroleum-based fuels and that uses petroleum-based lubricants and/or hydraulic fluids. Petroleum products stored on site will be stored in double-wall containment vessels or within a secondary containment system. Refueling will occur at a specified refueling location in the laydown yard area, or within the construction areas for some less portable equipment. Spill response kits will be kept on all refueling vehicles, to be used in the event that refueling or maintenance activities were to result in a spill. The Project will develop a spill prevention, control, and countermeasure (SPCC) plan for construction and operation. The SPCC plan will address the prevention of, preparedness for, and appropriate responses to any discharges of petroleum products. A copy of the SPCC plan will be maintained on site during construction, and construction personnel will be instructed in its use.

Because the facility is not anticipated to generate, store, treat, or dispose of bulk quantities of potential groundwater contaminants, the requirement to develop a groundwater protection plan

pursuant to 401 KAR 5:037 is not applicable to the proposed facility. However, many practices for groundwater protection from potential contaminants will be included in the above-mentioned SPCC plan. As mentioned previously, the occasional use of herbicides will be conducted by qualified, commercially licensed applicators. The use of steel piles to support the solar panels are not anticipated to negatively affect groundwater. Although the solar panels themselves have impermeable surfaces, there will be sufficient vegetated area between panel rows to allow for groundwater infiltration.

4.0 WASTES

According to the Applicant, facility construction is anticipated to generate approximately 15,000 cubic yards of construction waste, consisting primarily of wood pallets, cardboard, miscellaneous other packing materials, construction scrap, and general refuse. Construction waste will be collected from facility work areas and disposed of in dumpsters located at the laydown yards. A private contractor will empty the dumpsters as needed and dispose of the refuse at a licensed solid waste disposal facility. Waste materials will be recycled when possible. If any universal waste is generated during construction activities, it will be handled, managed, and disposed of in accordance with federal, state, and local regulations. Except for cleared woody vegetation, which may be chipped and mulched on site, all waste materials will be disposed of offsite.

Waste fluids from construction equipment maintenance activities and other sources will be stored in appropriate containers, with secondary containment where needed, for disposal by a licensed contractor. Portable toilets used for construction workers will be staked for stability and maintained by the contractor supplying the toilet facilities.

O&M activities will typically generate small amounts of waste materials, which could include wood, cardboard, metal packing/packaging materials, replaced facility components, and general refuse. O&M personnel will process waste materials following industry best management practices. Waste materials generated during facility operation will be stored temporarily in on-site dumpsters, which will be emptied on a regular basis for recycling or disposal at a licensed solid waste disposal facility. Small volumes of maintenance supplies, such as cleaning fluids, degreasers, herbicides, pesticides, oils, and fuels will be stored for occasional use at the facility. Waste materials generated from these supplies during facility operation will be stored temporarily in appropriate containers and will be recycled or disposed of on a regular basis by a licensed solid waste disposal facility. It is anticipated that the O&M activities will generate approximately 100 cubic yards of solid waste annually during operations.

5.0 WATER WITHDRAWAL

Solar panels generate electricity without the use of water. Therefore, there is no need for industrial-scale water withdrawal or treatment facilities. It is anticipated that normal precipitation in the region will be sufficient to remove dust and debris from the solar panels, so panel washing generally will not be required. Normal precipitation in the region is also expected to be sufficient to maintain vegetation coverage within the Project Area, once vegetation is established.

Construction of the facility will require the use of limited amounts of water, primarily for fugitive dust control, equipment washing, and compaction in areas such as access roads, foundations, and equipment pads. Water will be obtained from existing on-site wells (if functional), from existing drainage basins, or brought in from an off-site location. If necessary, a new on-site water well may be established, following applicable regulations. Water will be used and applied in conformance with the requirements of the SWPPP.

O&M activities will be conducted from an O&M building constructed within the Project Area. Potable water for the O&M building would be supplied from an existing well or a new well that would be established for this purpose. In addition, an on-site septic system would be developed for waste disposal. Water usage and wastewater production at the O&M building would be comparable to a single-family home. The water well and septic system would be established in accordance with all applicable regulations.

REFERENCES

KEEC. 2025. *Groundwater Basics*. https://eec.ky.gov/Environmental-Protection/Water/GW/Pages/GWBasics.aspx.

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Kentucky Geography Network. 2025. *Kentucky Groundwater Data Repository - Water Well and Spring Location Map*. https://kgs.uky.edu/kgsmap/KGSwater/viewer.asp.