COMMONWEALTH OF KENTUCKY

BEFORE THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING

In the Matter of:

ELECTRONIC APPLICATION OF PIKE COUNTY)	
SOLAR PROJECT, LLC FOR A CERTIFICATE OF)	
CONSTRUCTION FOR AN UP TO 100)	CASE NO.
MEGAWATT MERCHANT ELECTRIC SOLAR)	2024-00105
GENERATING FACILITY IN PIKE COUNTY,)	
KENTUCKY)	

ORDER

On May 14, 2024, Pike County Solar, LLC (Pike County Solar) filed an application with the Kentucky State Board on Electric Generation and Transmission Siting (Siting Board) seeking a Construction Certificate to construct an approximately 100-megawatt ground-mounted solar photovoltaic electric generating facility (Project) comprising approximately 1,543 acres of land in Pike County, Kentucky.

There are no intervenors in this matter. Pursuant to a procedural schedule established on June 5, 2024, Pike County Solar responded to two rounds of discovery.¹ A site visit was held on July 30, 2024. Siting Board consultant, Harvey Economics (Harvey), filed its report (Harvey Report) on September 10, 2024. Pike County Solar submitted its response to the Harvey Report on September 29, 2024. A formal hearing was held on October 16, 2024. Pike County Solar filed its responses to post-hearing

¹ Pike County Solar's First Response to Siting Board Staff's First Request for Information (Staff's First Request) (filed July 22, 2024); Pike County Solar's Second Response to Siting Board Staff's Second Request for Information (Staff's Second Request) (filed Aug. 27, 2024).

requests for information on October 25, 2024. The matter now stands submitted for a decision.

LEGAL STANDARD

The filing requirements and standard of review for requests to construct a merchant generating facility are set forth in KRS 278.700–.718. KRS 278.704(1) requires that an application be filed with and approved by the Siting Board before the construction of a merchant electric generating facility can commence. KRS 278.706 requires that the application include evidence of public notice and compliance with local planning and zoning ordinances.

KRS 278.708(2) requires Pike County Solar to prepare a site assessment report (SAR) that includes (1) a detailed description of the proposed site; (2) an evaluation of the compatibility of the facility with scenic surroundings; (3) potential changes in property values and land use resulting from the siting, construction, and operation of the proposed facility for property owners adjacent to the site; (4) evaluation of anticipated peak and average noise levels associated with the facility's construction and operation at the property boundary; (5) the impact of the facility's operation on road and rail traffic to and within the facility, including anticipated levels of fugitive dust created by the traffic and any anticipated degradation of roads and lands in the vicinity of the facility; and (6) any mitigating measures to be suggested by Pike County Solar to minimize or avoid adverse effects identified in the SAR.

KRS 278.710(1) delineates the criteria on which the Siting Board will grant or deny the certificate, which include (1) impact on scenic surroundings, property values, and surrounding roads; (2) anticipated noise levels during construction and operation of the

facility; (3) economic impact on the region and state; (4) whether the proposed facility meets all local planning and zoning requirements existing on the date the application was filed; (5) impact of the additional load on the reliability of jurisdictional utilities; (6) setback requirements; (7) efficacy of mitigation measures proposed by Pike County Solar; and (8) whether the applicant has a good environmental compliance history.

PROPOSED FACILITY

The Project will be located on 1,543 acres on a mountaintop-removal coal mine site in an unincorporated area of Pike County, Kentucky.² The Project includes approximately 191,436³ photovoltaic solar panels, associated ground-mounted racking, 25 inverters, a collection station and a substation.⁴ A project substation will connect to the existing electric grid via the Excel to Johns Creek 138 kV by an approximate 1-mile long, nonregulated transmission line, part of the Kentucky Power Company (Kentucky Power)/American Electric Power, Inc. (AEP) power grid.⁵ Pike County Solar is not requesting approval of a transmission line from the Siting Board at this time but stated that it intends to seek either a Construction Certificate under KRS 278.714 or a Certificate of Public Convenience and Necessity under KRS 278.020(1)(e) at a later time.⁶

² Application, Tab 2 Site Assessment Report at 1.

³ SAR, Exhibit F at 5.

⁴ SAR, Exhibit F at 5.

⁵ Application, Tab 2 Site Assessment Report at 3.

⁶ Pike County Solar's Response to Staff's Second Request, Item 2 and Hearing Video Testimony (HVT) of the October 16, 2024 hearing at 34:09-34:15, Jeannine Johnson.

DISCUSSION AND FINDINGS

I. KRS 278.708: SAR Filing Requirements and Mitigation Measures

Mitigation Measures Proposed by Pike County Solar and Siting Board Consultant

As required by KRS 278.708(4), Pike County Solar proposed various mitigation measures consistent with the statutes regarding traffic, noise, roadway preservation, permitting, setbacks, public safety, scenic preservation, and decommissioning.⁷

In accordance with KRS 278.708(5), Harvey recommended mitigation measures in the following areas: site development planning, compatibility with scenic surroundings, noise levels during construction and operation, road and traffic degradation; economic impacts; decommissioning; and complaint resolution programs.⁸

Pike County Solar disagreed with certain recommendations in the Harvey Report's proposed mitigation measures. The Harvey Report recommended "[t]hat the applicant, or its contractor will control access to the site during construction and operation. Site entrances would be gated and locked when not in use." Pike County Solar only contested the second sentence. Pike County Solar wanted the recommendation to include the applicant, or its contractor, will ensure any construction entrances will be gated and locked when not in use.¹⁰

The Harvey Report recommended "[t]he Applicant use anti-glare panels and operate the panels in such a way that glare from the panels is minimized or eliminated.

⁷ Application, Tab 12, SAR at 9.

⁸ Harvey Economics Review and Evaluation of Pike County Solar, LLC Site Assessment Report (Harvey Report) (filed September 10, 2024) at 6-2 to 6-8.

⁹ Harvey Report at 6-4.

¹⁰ Pike County Solar's Response to the Harvey Report (filed Sept. 24, 2024) at 1.

The Applicant will immediately adjust solar panel operations upon any complaint about glare from those living, working, or traveling in proximity to the Project."¹¹ Pike County Solar requested that the second sentence of the recommendation be eliminated. Pike County Solar noted that the Commission did not require such mitigation in other cases.¹² Pike County Solar also stated that its complaint process would address glare concerns.¹³

The Harvey Report recommended that, if pile-driving activity occurs within 1,500 feet of a noise sensitive receptor, the Applicant shall implement a construction method that will suppress the noise generated during the pile driving process (i.e., semi tractor and canvas method; sound blankets on fencing surrounding the Project site; or any other comparably effective method."¹⁴ Pike County Solar argued that this mitigation measure should not be adopted because the impacts are expected to be substantially less because pile-driving equipment to be used is substantially smaller than what is typically used in civil construction.¹⁵

The Harvey Report recommended that "if any components of the Facility are visible to neighboring homes after construction, the Applicant shall assess the feasibility of a screening plan, including consulting with neighbors to determine whether there are adverse impacts to their viewshed.¹⁶ If a screening plan is considered, regardless of

¹¹ Harvey Report at 6-4.

¹² Pike County Solar's Response to the Harvey Report at 2.

¹³Pike County Solar's Response to the Harvey Report at 2.

¹⁴ Harvey Report at 6-5.

¹⁵ Pike County Solar's Response to the Harvey Report at 3.

¹⁶ Harvey Report at 6-4.

whether it is ultimately implemented, notice of such consideration shall be filed with the Siting Board."¹⁷ Pike County Solar argued that this mitigation measure was unnecessary and reasonable complaints would be addressed through the complaint resolution plan.¹⁸

The Harvey Report recommended that "the applicant shall maintain functional mufflers on all diesel-powered equipment." Pike County Solar argued that there is no indication that diesel-powered equipment will produce such a sound level that it would be a nuisance to the public. If it is a nuisance, the issue could be addressed through the Compliant Resolution Plan. 21

The Siting Board has reviewed the mitigation measures proposed by Pike County Solar and in the Harvey Report, and finds that, in addition to those Pike County Solar has initially proposed, the mitigation measures set forth in Appendix A to this Order and discussed throughout this Order are appropriate and reasonable because they achieve the statutory purpose of mitigating the adverse effects identified in the SAR and the Harvey Report in accordance with KRS 278.708.

Detailed Site Description

KRS 278.708(3)(a)(1–6) requires that the detailed site description in the SAR include a description of (1) surrounding land uses for residential, commercial, agricultural, and recreational purposes; (2) the legal boundaries of the proposed site; (3) proposed

¹⁷ Harvey Report at 6-4.

¹⁸ Pike County Solar's Response to the Harvey Report at 3.

¹⁹ Harvey Report at 6-5.

²⁰ Pike County Solar's Response to the Harvey Report at 4.

²¹ Pike County Solar's Response to the Harvey Report at 4.

access control to the site; (4) the location of facility buildings, transmission lines, and other structures; (5) location and use of access ways, internal roads, and railways; and (6) existing or proposed utilities to service the facility.

Pike County Solar submitted the required SAR with its application.²² The SAR contained a preliminary site plan,²³ which was updated during the pendency of the proceedings.²⁴ The site plan included the project boundary, parcel boundaries, existing transmission lines, proposed point of interconnection, inverter locations, panel arrays, underground collection lines, existing roads, access roads, site access points, security fence, and proposed substation location.²⁵ The SAR estimated approximately 385 acres of vegetation clearing for construction.²⁶ A vegetative screening plan was not proposed.²⁷ According to the SAR, four separate entrances will allow access to the Project site during construction and operations.²⁸ Three entrances will be located along the Right Fork of Brushy Road on the west side of the Project site and one entrance will be located along Brushy Road on the east side of the Project site.²⁹ Approximately 34,282 linear feet of access roads will be constructed across the Project site.³⁰ Pike County Solar stated that

²² Application, Tab 12, Site Assessment Report.

²³ Application, Tab 12, Exhibit A.

²⁴ Pike County Solar's Response to Staff's Second Request for Information, Attachment C.

²⁵ Pike County Solar's Response to Staff's Second Request for Information, Attachment C.

²⁶ Pike County Solar's Response to Staff's First Request for Information, Item 73.

²⁷ Pike County Solar's Response to Staff's First Request for Information, Item 71.

²⁸ Harvey Report at 2-2.

²⁹ Harvey Report at 2-2.

³⁰ Harvey Report at 2-2.

it would not be using railways for any construction or operational activities.³¹ The legal boundaries of the proposed site were contained in the application.³²

According to Pike County Solar, a six-foot chain link fence meeting National Electrical Safety Code (NESC) requirements will secure the solar arrays with locked access gates.³³ In addition, a six-foot chain link fence with three strand barbed wire angled outward meeting NESC requirements will secure the substation.³⁴ All gates will be locked outside of normal working hours.³⁵ Project representatives also plan to engage with local law enforcement and fire services to provide information and to ensure they are familiar with the plan for security and emergency protocols during construction and operations.³⁶ Local electrical service will be required during construction and operation of the Project and is expected to be provided via distribution line by the local electric utility, which is Kentucky Power.³⁷ Water for construction-related dust control and operations will be obtained from several potential sources, including an on- or off-site groundwater well, or trucked from an off-site water purveyor.³⁸

³¹ SAR, at 8.

³² Application, Tab 12, Exhibit C.

³³ Harvey Report at 2-2.

³⁴ Harvey Report at 2-2.

³⁵ Harvey Report at 2-2.

³⁶ Pike County Solar's Responses to Staff's First Request for Information, Item 8.

³⁷ Pike County Solar's Responses to Staff's First Request for Information, Item 12.

³⁸ Harvey Report at 2-2.

The facility will be located on a reclaimed, mountaintop removal coal mine site in an unincorporated area of Pike County, Kentucky.³⁹ The area leased for the facility includes approximately 1,543 acres of reclaimed mine land (the Facility Area).⁴⁰ According to the Proposed Site Description the footprint of the facility Area will only be approximately 500 acres based on the area underneath the solar arrays, inverters, substation, and private access roads.⁴¹ The area around the Project site predominantly consists of forested land, as well as residential properties.⁴² Heavy vegetation surrounds the Project site; much of the area is comprised of forested land.⁴³ The Project site is elevated, with residential properties in the valleys below.⁴⁴ The nearest aircraft facility is the Pike County Airport (KPBX), located 6.3 miles west-southwest of the Project.⁴⁵ An elementary school is located at the intersection of Meta Highway and Ford Mountain Road, where the majority of construction traffic will be routed. 46 Eight areas identified as residential neighborhoods are located within 2,000 feet of the Project site.⁴⁷ There are no schools, hospitals, or nursing homes within 2,000 feet of the Applicant's proposed location of Project structures or facilities used for generating electricity.⁴⁸

³⁹ Application, Tab 2, Proposed Site Description.

⁴⁰ Application, Tab 2, Proposed Site Description

⁴¹ Application, Tab 2, Proposed Site Description.

⁴² Harvey Report at 2-1.

⁴³ Harvey Report at 2-1.

⁴⁴ Harvey Report at 2-1.

⁴⁵ SAR, at 4.

⁴⁶ Harvey Report at 5-37.

⁴⁷ Harvey Report at 3-7.

⁴⁸ Harvey Report at 3-7.

Having reviewed the record of this proceeding, the Siting Board finds that Pike County Solar has complied with the requirements for describing the facility and a site development plan as required by KRS 278.708. However, the Siting Board finds that it necessary to impose specific mitigation measures and requirements related to the description of the facility and the proposed site development plan. The Siting Board will require that Pike County Solar keep the Siting Board apprised of changes throughout the development of the Project and, as such, will order Pike County Solar to provide the final site plan before the commencement of construction. The final site plan should indicate and highlight any change, including those to the design and boundaries of the Project, from the proposed site plan provided to the Siting Board during the pendency of this matter. Furthermore, based on the findings and proposals of the Harvey Report, the Siting Board finds that additional mitigation measures are required. These mitigation measures are outlined in Appendix A to this Order and, in particular, mitigation measures 1 through 10.

Compatibility with Scenic Surroundings

The proposed Project is on a former surface coal mine that is partially reclaimed and includes some forested, undeveloped land.⁴⁹ Most of the panels will be located on the clear and disturbed areas, which occupy hilltops partially flattened during past mining operations.⁵⁰ The proposed site topography ranges from 840 feet above mean sea level to 1,600 feet at the highest hilltops.⁵¹ Existing vegetation includes trees, bushes, and

⁴⁹ Harvey Report at 2-3.

⁵⁰ Harvey Report at 2-3.

⁵¹ Harvey Report at 2-3.

grasses and vegetation is relatively dense in most areas surrounding the Project.⁵² Pike County Solar stated that fourteen residential structures may have a view of any portion of the project including fencing, solar arrays or substation.⁵³

The Harvey Report concluded that the proposed facility is compatible with the scenic surroundings.⁵⁴ The Harvey Report noted that the site is considerably elevated, and due to the dense existing vegetation and steep topography in much of the area, the visual impacts would be minimal.⁵⁵ Further, the Harvey Report stated that the project site will not be visible from most viewpoints due to its isolated location at the top of a high ridge, even without the development of additional visual barriers.⁵⁶

Having reviewed the record, the Siting Board finds that the location of the proposed facility, given its elevation and distance from the nearest residences, combined with the pre-existing vegetation around the perimeter, will mitigate the effects the proposed facility will have on scenic surroundings of the site. However, to ensure the continued compatibility of scenic surrounding, mitigation measures addressing obligations to maintain or further develop vegetative buffers and keep the Siting Board informed of potentially material changes to the site plan are necessary. As such, and based on the record, additional mitigation measures regarding scenic compatibility are outlined in Appendix A to this Order, specifically mitigation measures 11 through 14.

⁵² Harvey Report at 5-6.

⁵³ Pike County Solar's Response to Staff's First Request, Item 58.

⁵⁴ Harvey Report at 5-9.

⁵⁵ Harvey Report at 5-9.

⁵⁶ Harvey Report at 5-9.

Impact on Property Values

Pike County Solar submitted a property value impact report conducted by Kirkland Appraisals (Kirkland Report), a certified real estate appraiser.⁵⁷ The Kirkland Report found that, based upon a comparative analysis, the solar facility will have no impact on the property values of abutting or adjoining residential or agricultural properties.⁵⁸ The report indicated that the solar facility would function in a harmonious manner with the nearby surroundings, which are mostly agricultural, and that operation of the Project would not generate the level of noise, odor, or traffic to negatively impact the nearby surroundings as compared to a fossil fuel generating facility or other industrial facilities.⁵⁹

Harvey also evaluated the impact of the project on property values.⁶⁰ After reviewing additional research studies, Harvey spoke with the Pike County Property Value Administrator (PVA).⁶¹ The Pike County PVA does not expect the Pike County Solar facility to have much, if any impact on local property values.⁶² The Harvey Report concluded that property values in the project area and in Pike County are unlikely to be affected by the Pike County Solar facility.⁶³ The Harvey Report conclusion assumed that mitigation measures such as working with homeowners regarding visual impacts and

⁵⁷ SAR, Exhibit B, Property Value Impact at 2.

⁵⁸ SAR, Exhibit B, Property Value Impact at 2.

⁵⁹ SAR, Exhibit B, Property Value Impact at 2 and 108.

⁶⁰ Harvey Report, Section 5 at 10-17.

⁶¹ Harvey Report, Section 5 at 16.

⁶² Harvey Report, Section 5 at 16.

⁶³ Harvey Report, Section 5 at 18.

impacts from noise and traffic activities would be initiated. 64

Having reviewed the record, the Siting Board finds that sufficient evidence to conclude that the proposed Pike County Solar's project will not have any significant adverse impact on nearby property values. The characteristics of the solar facility's operations are passive, and the facility will be temporary, with the land returned to its natural state after a few decades of operation. This facility does not produce any air, noise, waste, or water pollution, nor does it create any traffic issues during operations.

Anticipated Noise Level

Pike County Solar's Acoustic Assessment Report was completed by Environmental Resources Management, Inc. (ERM).⁶⁵ ERM used representative noise levels from the Federal Highway Administration's Roadway Construction Noise Model.⁶⁶ ERM stated the estimated maximum noise levels during construction will occur during pile driving, and estimated that at the closet receiver, 1,094 feet from the closet panel, would have noise levels during pile driving of 50 decibels A-weighted scale (dBA).⁶⁷ Construction related activity is expected to occur between 8 a.m. and 8 p.m.⁶⁸

ERM found operational noise will emanate from inverters and transformers.⁶⁹ Based on ERM's operational sound modeling, the highest sound level at nearby sensitive

⁶⁴ Harvey Report, Section 5 at 18.

⁶⁵ Application, Tab 12, Exhibit D, Acoustic Assessment Report.

⁶⁶ Application, Tab 12, Exhibit D, Acoustic Assessment Report at 7.

⁶⁷ Application, Tab 12, Exhibit D, Acoustic Assessment Report at 8.

⁶⁸ Application, Tab 12, Exhibit D, Acoustic Assessment Report at 8.

⁶⁹ Application, Tab 12, Exhibit D, Acoustic Assessment Report at 5.

receptors was 20 dBA.⁷⁰ ERM stated that the Project's generated noise levels for daytime and nighttime operation are estimated to be below the U.S. Environmental Protection Agency's recommended protective noise level of 48.6 dBA for 24-hour operation.⁷¹ ERM concluded that no one Noise Sensitive Area will be exposed to the same sound levels over an extended period of time, as construction progresses through the site.⁷²

Harvey evaluated the Acoustic Assessment Report conducted by ERM and concluded that the Project's construction phase will produce the highest noise levels during pile-driving activity.⁷³ Harvey also concluded the Project's construction phase may cause annoyance for surrounding residences, though it may not present damage to hearing.⁷⁴

As indicated by ERM and Harvey, the noise will be loudest during the construction phase but will not be permanent to nearby residents. The Siting Board finds that the operational noise from inverters and the main transformer should have little to no effect on residences in the area. Based on the case record, the Siting Board finds that Pike County Solar's application is in compliance with the statutory requirements for disclosing noise levels. However, the Siting Board further finds that, based on the entire record, to ensure the impact of construction noise does not unduly impact nearby residents, Pike County Solar will be required to implement specific mitigation measures. The mitigation measures implemented by the Siting Board are designed to limit the effects of

⁷⁰ Application, Tab 12, Exhibit D, Acoustic Assessment Report at 7.

⁷¹ Application, Tab 12, Exhibit D, Acoustic Assessment Report at 11.

⁷² Application, Tab 12, Exhibit D, Acoustic Assessment Report at 11.

⁷³ Harvey Report at 5-4.

⁷⁴ Harvey Report at 5-26.

construction noise by controlling the hours of construction in general, as well as the time and manner pile driving can occur. The Siting Board will require Pike County Solar to mitigate construction noise up to 1,500 feet to ensure the surrounding community is not negatively impacted by the construction noise. Pike County Solar may forego noise suppression if it employs a panel installation method that does not involve pile driving, so long as the method does not produce noise levels similar to pile driving. These mitigation measures are outlined in Appendix A to this Order, specifically mitigation measures 15 through 17.

Impact on Roads, Railways, and Fugitive Dust

Construction is anticipated to take 12-18 months.⁷⁵ The project site will have primary access points along US 119, KY 881(Brushy Road) and KY 1426 (Bent Branch Road). Pike County Solar does not anticipate any change to the operational level of the surrounding roads during the construction phase of the project.⁷⁶

Harvey found there would be noticeable increases in traffic volumes on local roads during the construction phase partially due to the low amount of traffic on the local roads prior to construction, making any increase in traffic noticeable.⁷⁷ Harvey also indicated that the narrow roads and lack of shoulders on several roads in the Project area will require drivers to pull over to pass and increase inconvenience to local residents during the construction period.⁷⁸

⁷⁵ HVT of the October 16, 2024 hearing at 7:24-7:32, Jeannine Johnson.

⁷⁶ Application, Exhibit E at 1.

⁷⁷ Harvey Report at 5-34.

⁷⁸ Harvey Report at 5-34.

During the operational phase of the project, it is estimated that the Project will have one vehicle travel to site each day.⁷⁹ Little to no impact on traffic is expected during operations.⁸⁰

The Siting Board finds that traffic and road degradation issues can be addressed with Pike County Solar's mitigation measures, the additional mitigation measures proposed by Harvey, and mitigation measures set forth in Appendix A to this Order and in particular, mitigation measures 19 through 27.

The Siting Board anticipates some fugitive dust from the construction phase. Pike County Solar stated it will mitigate the dust from construction by covering soil piles and application of water as necessary. According to the Harvey Report, dust will not be a factor during the operations phase. The Siting Board requires additional mitigation measures to reduce any potentially harmful effects on the area, which are outlined in Appendix A to this Order. The Siting Board will require Pike County Solar to inform the Siting Board and the Energy and Environment Cabinet (EEC) of the date construction will commence, 30 days prior to said date, to ensure the proper permits have been obtained and that proper steps have been taken to comply with the mitigation measures set forth in Appendix A to this Order.

⁷⁹ Application, Exhibit E at 8.

⁸⁰ Application, Exhibit E at 9.

⁸¹ Application, SAR at 7.

⁸² Harvey Report at 2-5.

KRS 278.710(1) Criteria

In addition to the evaluation of the factors addressed in the SAR, the Siting Board considered the below described factors set forth in KRS 278.710(1) in rendering its decision.

Economic Impact on Affected Region and the State

Pike County Solar's economic impact report discusses the proposed solar facility and its investment into the surrounding Pike County economy. The projected local total investment includes architecture, engineering, site preparation and other development and construction costs.⁸³ An estimated \$6.7 million of equipment will be procured within Pike County and an additional \$5.7 million of equipment will be procured from within the rest of Kentucky.⁸⁴ The project is expected to generate significant positive economic and fiscal impacts to Pike County over the thirty-five year life of the project.⁸⁵ Such impacts include the creation of hundreds of construction jobs and the expansion of the local tax base. The project will be conducted in two phases: a construction phase which is estimated to last 12 to 18 months and an operation phase, which will last the remaining life of the project.⁸⁶

The IMPLAN model used for the economic impact analysis focused on Pike County only because of the lack of industrial linkages in the region.⁸⁷ During the project

⁸³ Application, Tab 10 at 8.

⁸⁴ Harvey Report, Section 5 at 39.

⁸⁵ Application, Tab 10 at 1, Response to Staff's First Request for Information, Item 91 and Harvey Report, Section 5 at 43.

⁸⁶ Application, Tab 10 at 8.

⁸⁷ Application, Tab 10 at 7 and 11-12.

construction phase, Pike County Solar estimated that approximately 240 temporary, full-time jobs will be created over the construction period with a direct payroll of approximately \$14.6 million including fringe benefits.⁸⁸ This equates to an average wage of \$60,700 per construction job as compared to the 2022 average annual pay for all jobs in Pike County of \$47,970.⁸⁹ The indirect and induced economic impacts are estimated to contribute another 88 jobs with an additional \$3.23 million in payroll. ⁹⁰

The total construction phase economic impact is estimated to be 328 total full-time equivalent jobs in Pike County with a new payroll of \$17.83 million.⁹¹ The vast majority of these jobs will be filled by skilled workers and contractors such as fencers, electricians, panel installers, equipment operators and construction managers.⁹² Pike County Solar intends to hire as many local workers as permitted by the Engineering, Procurement, and Construction (EPC) contractor it chooses for the project.⁹³ Given Pike County Solar's previous experience with the Martin County Solar project, the terms of EPC contract will have to precisely lay out the requirements for hiring local workers.⁹⁴

The ongoing economic impact from the project's operational phase is estimated to be very small relative to the one-time impacts from the construction phase. The ongoing

⁸⁸ Application, Tab 10 at 9.

⁸⁹ Application, Tab 10 at 10.

⁹⁰ Application, Tab 10 at 10-11 (calculated by subtracting direct jobs and payroll from total jobs and payroll: 328 Total Jobs minus 240 Direct Jobs equals 88 Induced Jobs; \$17.83 million Total Payroll minus \$14.6 million Direct Payroll equals \$3.23 million Induced Payroll) and Harvey Report, Section 5 at 40.

⁹¹ Application, Tab 10 at 11.

⁹² Application, Tab 10 at 10.

⁹³ Hearing Video Testimony (HVT) of the October 16, 2024 hearing, Erich Miarka Testimony (Miarka Testimony) at 1:42:08-1:42:24.

⁹⁴ HVT of the October 16, 2024 hearing, Miarka Testimony a 01:43:26–01:44:00.

operational phase of the project is expected to modestly support 3.2 jobs for the job site. More broadly, the project will support 9.6 total jobs with an estimated employee compensation of \$102,000 per job and a total labor income of \$613,000.95

Pike County Solar and Pike County are in the early stages of negotiating an Industrial Revenue Bond (IRB) and a Payment in Lieu of Taxes (PILOT) Agreement, but no definitive terms have been agreed upon. During the construction phase, an estimated \$178,000 in occupational taxes will be collected over the construction period. During the operations phase, an estimated \$6,000 per year in occupational taxes will be collected over the remaining project life. Tover the total life of the project, an estimated \$3,630,018 in tax payments will be paid to Pike County and an estimated \$7,360,397 in tax payments will be paid to the school district. The overall Project will generate, \$4,907,605 in property tax payments, \$7,089,041 in franchise tax payments, and \$3,785,161 in manufacturing machinery tax payments is estimated to be paid over the total life of the project.

Harvey evaluated the economic impact of the Project. Based upon its review and analysis, Harvey concluded that the Project would provide significant positive

⁹⁵ Application, Tab 10 at 12

⁹⁶ Response to Staff's First Request for Information, item 90 and HVT of the October 16, 2024, hearing, Jeannine Johnson Testimony (Johnson Testimony) at 14:06.

⁹⁷ Application, Tab 10 at 15.

⁹⁸ Harvey Report at 5-42.

⁹⁹ Harvey Report at 5-42.

¹⁰⁰ Harvey Report at 5-39.

economic effects to the region and the Commonwealth of Kentucky during the construction and operations phases of the Project. 101

Having reviewed the record, the Siting Board finds that the Pike County Solar facility will have a positive economic impact on the region.

Existence of Other Generating Facilities

Pike County Solar indicated that there are no existing facilities near the proposed site that generate electricity.¹⁰² Pike County Solar stated that the onsite substation will connect to the existing electric grid via the Excel to Johns Creek 138 kV by an approximate 1-mile long, nonregulated transmission line, part of the Kentucky Power/AEP power grid.¹⁰³

Local Planning and Zoning Requirements

Pike County does have Planning and Zoning but has not enacted any zoning ordinances or setback requirements.¹⁰⁴ The statutory requirements of KRS 278.706(2)(e) apply unless a deviation is applied for and granted by the Siting Board. KRS 278.706(2)(e) requires that all proposed structures or facilities used for generation of electricity must be 2,000 feet from any residential neighborhood, school, hospital, or nursing home facility. The Project will be within 2,000 feet of a residential neighborhood.¹⁰⁵ However, there are no schools, hospitals, or nursing home facilities

¹⁰¹ Harvey Report at 5-42.

¹⁰² Application, Tab 7 at 2.

¹⁰³ SAR at 2.

¹⁰⁴ Notice of Intent filed on April 12, 2024 and SAR at 2.

¹⁰⁵ Pike County Solar's Motion for Deviation from Setback Requirements at 2.

Impact on Transmission System

The project is located within the territory of PJM Interconnection LLC (PJM). Pike County Solar obtained a queue position with PJM on January 21, 2020.¹⁰⁷ PJM has conducted a facility study and the system impact study.¹⁰⁸ This project has completed the interconnection process.¹⁰⁹ An Interconnection Services Agreement has also been completed between PJM Interconnection, LLC, Pike County Solar Project, LLC, and Kentucky Power Company.¹¹⁰

Based upon the case record, the Siting Board finds that Pike County Solar has satisfied the requirements of KRS 278.710(f) and that the additional load imposed upon the electricity transmission system by the generation of electricity at the Pike County facility will not adversely affect the reliability of service for retail customers of electric utilities regulated by the Kentucky Public Service Commission. This finding is based upon Pike County Solar's commitment to the interconnection process and protocols consistent with the requirements of KRS 278.212.

Pike County Solar's application describes the proposed Project as including a transmission line approximately one mile in length. However, Pike County Solar stated that no detailed information regarding the specific transmission line route, structures or construction schedule is available at this time. Pike County Solar stated that it intends to

¹⁰⁶ Pike County Solar's Motion for Deviation from Setback Requirements at 2.

¹⁰⁷ Application, Tab 9, Effect on the Electric Transmission System in Kentucky at 1.

¹⁰⁸ Application, Tab 9, Effect on the Electric Transmission System in Kentucky at 1.

¹⁰⁹ HVT of the October 16, 2024 hearing, Johnson Testimony at 34:18-34:30.

¹¹⁰ Pike County Solar's Response to Staff's Post Hearing Request, Item 7.

seek either a Construction Certificate under KRS 278.714 or a Certificate of Public Convenience and Necessity under KRS 278.020(1)(e), as applicable depending on the length and capacity of the line.¹¹¹

Compliance with Setback Requirements

Pike County does have planning and zoning however it has not enacted any zoning ordinances or setback requirements. The statutory requirements of KRS 278.706(2)(e) requires that all proposed structures or facilities used for generation of electricity must be 2,000 feet from any residential neighborhood, school, hospital, or nursing home facility. 112 KRS 278.700(6) defines "residential neighborhood" as a populated area of five or more acres containing at least one residential structure per acre. 113 KRS 278.704(4) authorizes the Siting Board to grant a deviation from the setback requirements in KRS 278.706(2) if requested. Pike County Solar has requested a deviation from the setback requirements in KRS 278.706(2)(e). Pike County Solar stated there are eight residential neighborhoods within 2,000 feet of the project's boundaries. 116

Of the eight residential neighborhoods, Neighborhood 4 is the closest. The projects boundary line is proposed to be 708 feet from the closest residence in

¹¹¹ Pike County Solar's Response to Staff's Second Request, Item 2.

¹¹² KRS 278.706(2)(e).

¹¹³ KRS 278.700(6).

¹¹⁴ KRS 278.704(4).

¹¹⁵ Pike County Solar's Motion for Deviation from Setback Requirements.

¹¹⁶ Pike County Solar's Motion for Deviation from Setback Requirement at 2.

¹¹⁷ Pike County Solar's Response to Staff's Post Hearing Request, Item 5.

Neighborhood 4.¹¹⁸ The closest solar panel is proposed to be 1,880 feet from the closest residence in Neighborhood 4.¹¹⁹ Neighborhood 3 and Neighborhood 4 are closest to the project's inverters.¹²⁰ The closest inverter is 2,542 feet from the closest home in Neighborhood 4 and 2,816 feet from the closest home in Neighborhood 3.¹²¹ All neighborhoods are over 2,263 feet from the projects substation.¹²²

The Siting Board finds, given the totality of the mitigation measures proposed by Pike County Solar, the nature of the surrounding property and the mitigation measures the Siting Board has imposed in Appendix A, the statutory purposes are met by the project. The Siting Board grants a deviation from this requirement as to residences and residential neighborhoods as set forth in Appendix A to this Order. Exceptions to these setback requirements for participating landowners, and easement holders, are included in Appendix A mitigation measure 18.

<u>History of Environmental Compliance</u>

In the application, Pike County Solar stated that neither it, nor anyone with an ownership interest in it, has violated any environmental laws, rules, or administrative regulations that resulted in criminal confiscation, or a fine greater than \$5,000.¹²³ Further, Pike County Solar is not the subject of any pending judicial or administrative actions.¹²⁴

¹¹⁸ Pike County Solar's Response to Staff's Post Hearing Request, Item 5.

¹¹⁹ Pike County Solar's Response to Staff's Post Hearing Request, Item 5.

¹²⁰ Pike County Solar's Response to Staff's Post Hearing Request, Item 5.

¹²¹ Pike County Solar's Response to Staff's Post Hearing Request, Item 5.

¹²² Pike County Solar's Response to Staff's Post Hearing Request, Item 5.

¹²³ Application, Tab 11 at 1.

¹²⁴ Application, Tab 11 at 1.

Transfer of Ownership

Solar developments are often sold to other companies during the planning, construction, and operation of projects. When a construction certificate for a solar facility is sought, the Project and the developers are thoroughly evaluated to ensure that the Project will comply with all statutory and regulatory requirements. After review, the construction certificate is conditionally granted on the condition of full compliance with all mitigation measures, some of which continue into the operation of the project. As noted in the preceding section, the Siting Board not only reviews the history and abilities of the Person¹²⁵ seeking the certificate, but also the entities that have an ownership interest in the Project. Here, the applicant has no resources or employees of its own, and instead depends on the resources and employees of affiliates or entities with an ownership interest in it. Savion, LLC will employ the persons responsible for compliance with the construction certificate during construction and the persons responsible for the continued compliance during operations. 126 Without Savion LLC, Pike County Solar would not have the managerial, technical, or financial capability necessary to construct or operate the facility, nor to comply with the conditions required herein. As such, the Siting Board will require approval of the transfer of ownership or control of Pike County Solar, to the person seeking the construction certificate in this matter. Without knowledge of who is providing the resources and employees to Pike County Solar to ensure ongoing compliance with the measures required herein, there is no way to ensure the requirements are adhered to

¹²⁵ KRS 278.700(3) defines a person as any individual, corporation, public corporation, political subdivision, governmental agency, municipality, partnership, cooperative association, trust, estate, two (2) or more persons having a joint or common interest, or any other entity.

¹²⁶ HVT of the October 16, 2024 hearing, Johnson Testimony at 32:27-32:36.

throughout the life of the Project. To be clear, this condition does not apply to the actual transfer of the facility, but rather the transfer of ownership or control of the person holding the certificate to construct. The measures related to the transfer of ownership or control of the person holding the construction certificate are set forth more fully in Appendix A to this Order, specifically mitigation measure 28.

Decommissioning

Pike County Solar submitted a decommissioning plan with the application.¹²⁷ The decommissioning plan and the applicable property leases contain covenants to remove all underground components.¹²⁸ Pike County Solar indicated it will secure a bond to assure financial performance of the decommissioning obligation.¹²⁹

The Siting Board finds that Pike County Solar must return the land to its original use, to the extent possible, at the end of the Project's life. Returning the land back to its original state and use after decades of operation is an important part of the Siting Board's finding regarding the impact of the facilities on scenic surroundings, property values, and the economy. The relatively "temporary" nature of the facilities compared to other types of more permanent development, such as thermal merchant generation facilities, industrial operations, or housing, is a prime consideration of the Siting Board in granting a certificate, with conditions, in this matter. An inability or unwillingness to return the land back to its prior state after the life of the facility, including leaving underground facilities in excess of three feet, increases the permanence of the facility. As such, the Siting Board

¹²⁷ SAR, Exhibit F.

¹²⁸ Application, Exhibit F at 7 and Pike County Solar's Response to Staff's First Request, Item 1 and 92.

¹²⁹ Application, Exhibit F at 10.

requires the removal of all components above and below ground. Removal of all underground components and regrading or recompacting the soil for later use will mitigate any damage to the land, thus returning the land to a state that provides at least as great of an economic impact as it does today. The Siting Board will also require additional mitigation measures related to decommissioning, which are outlined in Appendix A to this Order, mitigation measures 29 through 32.

CONCLUSION

After carefully considering the criteria outlined in KRS Chapter 278, the Siting Board finds that Pike County Solar has presented sufficient evidence to support the issuance of a Construction Certificate to construct the proposed merchant solar facility. The Siting Board conditions its approval upon the full implementation of all mitigation measures and other requirements described herein and listed in Appendix A to this Order. A map showing the location of the proposed solar generating facility is attached hereto as Appendix B.

IT IS THEREFORE ORDERED that:

- 1. Pike County Solar's application for a Construction Certificate to construct an approximately 100 MW merchant solar electric generating facility in Pike County, Kentucky, is conditionally granted subject to full compliance with the mitigation measures and conditions prescribed in Appendix A.
- 2. Pike County Solar's motion for deviation from the setback requirements in KRS 278.704(2) is granted. Pike County Solar shall comply with the setbacks prescribed in the mitigation measures.
 - 3. Pike County Solar shall fully comply with the mitigation measures and

conditions prescribed in Appendix A to this Order.

4. In the event mitigation measures within the body of this Order conflict with those prescribed in Appendix A to this Order, the measures in Appendix A shall control.

5. This case is closed and removed from the Commission's docket.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING Chairman, Public Service Commission lic Service Commission Commissione Public Service Commission Environment Cabinet, or her designee Secretary, Cabinet for Economic Development, or his designee Elmon Walters, ad hoc member **ENTERED** NOV 15 2024 AH KENTUCKY PUBLIC SERVICE COMMISSION

ATTEST:

Executive Director
Public Service Commission
on behalf of the Kentucky State
Board on Electric Generation
and Transmission Siting

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING IN CASE NO. 2024-00105 DATED NOV 15 2024

MITIGATION MEASURES AND CONDITIONS IMPOSED

The following mitigation measures and conditions are hereby imposed on Pike County Solar Project, LLC (Pike County Solar) to ensure that the facilities proposed in this proceeding are constructed as ordered.

- 1. A final site layout plan shall be submitted to the Siting Board upon completion of the final site design. Deviations from the preliminary site layout should be clearly indicated on the revised graphic. Those changes could include, but are not limited to, location of solar panels, inverters, transformers, substation, operation and maintenance building, transmission line route, or other Project facilities and infrastructure.
- 2. Any change in the Project boundaries from the information that formed this evaluation shall be submitted to the Siting Board for review.
- 3. The Siting Board will determine whether any deviation in the boundaries or site layout plan is likely to create a materially different pattern or magnitude of impacts.
- 4. Pike County Solar shall provide the date that construction will commence to the Siting Board and the Kentucky Energy and Environment Cabinet, Division of Waste Management 30 days prior to the commencement of construction of the Project.
- 5. Pike County Solar shall submit a status report to the Siting Board every six months until the project begins generating electricity to update the Siting Board on the progress of the Project. The report shall reference this case number and be filed in post-case correspondence in this case.

- 6. Pike County Solar shall comply with all requirements in KRS 278.710 for monitoring by EEC.
- 7. Prior to construction, Pike County Solar shall provide a finalized Emergency Response Plan to the local fire district, first responders, and any county Emergency Management Agency. Pike County Solar shall provide site-specific training for local emergency responders at their request. Access for fire and emergency units shall be set up after consultation with local authorities.
- 8. Pike County Solar or its contractor will control access to the site during construction and operation. All construction entrances will be gated and locked when not in use.
- 9. Pike County Solar's access control strategy shall also include appropriate signage to warn potential trespassers. Pike County Solar must ensure that all site entrances and boundaries have adequate signage, particularly in locations visible to the public, local residents, and business owners.
- 10. The security fence must be installed prior to activation of any electrical installation work in accordance with National Electrical Safety Code (NESC) standards. The substation shall have its own separate security fence and locked access installed in accordance with NESC standards.
- 11. If any components of the facility are visible to neighboring homes after construction, Pike County Solar shall assess the feasibility of a screening plan, including consulting neighbors to determine whether there are adverse impacts to their viewshed. If a screening plan is considered, regardless of whether it is ultimately implemented, notice of such consideration shall be filed with the Siting Board.

- 12. Existing vegetation between solar arrays and nearby roadways and homes shall be left in place to the extent feasible to help minimize visual impacts and screen the Project from nearby homeowners and travelers.
- 13. Pike County Solar will not remove any existing vegetation except to the extent it must remove such vegetation for the construction and operation of Project components.
- 14. To the extent that an affected adjacent property owner indicates Pike County Solar that a visual buffer is not necessary, Pike County Solar will obtain that property owner's written consent and submit consent in writing to the Siting Board.
- 15. Pike County Solar is required to limit construction activity, process, and deliveries to the hours between 8 a.m. and 6 p.m. local time, Monday through Saturday. The Siting Board directs that construction activities that create a higher level of noise, such as pile-driving, will be limited to 9 a.m. to 5 p.m. local time, Monday through Friday. Non-noise causing and non-construction activities can take place on the site between 7 a.m. and 10 p.m. local time, Monday through Sunday, including field visits, arrival, departure, planning, meetings, mowing, surveying, etc.
- 16. If the pile-driving activity occurs within 1,500 feet of a noise-sensitive receptor, Pike County Solar shall implement a construction method that will suppress the noise generated during the pile-driving process (i.e., semi-tractor and canvas method; sound blankets on fencing surrounding the solar site; or any other comparable method). Pike County Solar can forego using noise suppression measures if it employs a panel installation method that does not use pile driving, so long as that method does not create noise levels similar to pile driving.

17. Pike County Solar shall notify residents and businesses within 2,400 feet of the Project boundary about the construction plan, the noise potential, any mitigation plans, and its Complaint Resolution Program referred to in Item 33 of this Appendix, at

least one month prior to the start of construction.

- 18. Pike County Solar shall place panels, inverters, and substation equipment consistent with the distances to noise receptors to which it has committed in its maps and site plans. The Siting Board approves Pike County Solar's proposed setback from residences of 1,800 feet from any panel or string inverter. The Siting Board also approves a distance of 1,800 feet between any solar panel or string inverter and any residential neighborhood and 100 feet from any exterior property line. Nevertheless, Pike County Solar shall not place solar panels or string inverters, if used, closer than 150 feet from a residence, church, or school, 25 feet from non-participating adjoining parcels, or 50 feet from adjacent roadways. Pike County Solar shall not place a central inverter, and if used, energy storage systems, closer than 450 feet from any adjacent residences, church, or school. These further setbacks shall not be required for residences owned by landowners involved in the Project that explicitly agree to lesser setbacks and have done so in writing. All agreements by participating landowners to lesser setbacks must include language advising the participating landowners of the setbacks otherwise required herein. All agreements by participating landowners to lesser setbacks must be filed with the Siting Board prior to commencement of the Project.
- 19. Pike County Solar shall fix or pay for repairs for damage to roads and bridges resulting from any vehicle transport to the site. For damage resulting from vehicle transport in accordance with all permits, those permits will control.

Appendix A Case No. 2024-00105

- 20. Pike County Solar shall comply with all laws and regulations regarding the
- use of roadways.
- 21. Pike County Solar shall implement ridesharing between construction
- workers when feasible, use appropriate traffic controls, or allow flexible working hours
- outside of peak hours to minimize any potential traffic delays during a.m. and p.m. peak
- hours.
- 22. Pike County Solar shall consult with the Kentucky Transportation Cabinet
- (KYTC) regarding truck and other construction traffic and obtain necessary permits from
- the KYTC.
- 23. Pike County Solar shall consult with the Pike County Road Department
- (PCRD) regarding truck and other construction traffic and obtain any necessary permits
- from the PCRD.
 - 24. Pike County Solar shall develop special plans and obtain necessary permits
- before transporting heavy loads, especially the substation transformer, onto state or
- county roads.
 - 25. Pike County Solar shall comply with any road use agreement executed with
- PCRD. Such an agreement might include special considerations for overweight loads,
- routes utilized by heavy trucks, road weight limits, and bridge weight limits.
- 26. Pike County Solar shall develop and implement a traffic management plan
- to minimize the impact on traffic flow and keep traffic safe. Any such traffic management
- plan shall also identify any traffic-related noise concerns during the construction phase
- and develop measures that would address those noise concerns.

- 27. Pike County Solar shall properly maintain construction equipment and follow best management practices related to fugitive dust throughout the construction process, including the use of water trucks. Dust impacts shall be kept at a minimal level. The Siting Board requires Pike County Solar's compliance with 401 KAR 63:010.
- 28. If any Person as defined by KRS 278.700(3) shall acquire or transfer ownership of, or control, or the right to control Pike County Solar, by sale of assets, transfer of stock, or otherwise, or abandon the same, Pike County Solar or its successors or assigns shall request explicit approval from the Siting Board with notice of the request provided to the Pike County Fiscal Court. In any application requesting such abandonment, sale, or change of control, Pike County Solar and any proposed entity with an ownership interest in Pike County Solar shall certify its compliance with KRS 278.710(1)(i).
- 29. As applicable to individual lease agreements, Pike County Solar, its successors, or assigns will abide by the specific land restoration commitments agreed to by individual property owners as described in each executed lease agreement.
- 30. Pike County Solar has filed a complete and explicit decommissioning plan with the Siting Board. If this decommissioning plan should change, Pike County Solar shall submit an updated decommissioning plan pursuant to KRS 278.710(8).
- 31. Pike County Solar or its assigns shall provide notice to the Siting Board, if, during any two-year (730 days) period, it replaces more than 20 percent of its facilities. Pike County Solar shall commit to removing the debris and replaced facility components from the Project site and from Pike County upon replacement. If the replaced components are properly disposed of at a permitted facility, they do not have to be physically removed

from Pike County. However, if the replaced facility components remain in the county, Pike County Solar must inform the Siting Board of the location where the components are being disposed.

- 32. Any disposal or recycling of Project equipment, during operations or decommissioning, shall be done in accordance with applicable laws and requirements.
- 33. Prior to construction, Pike County Solar shall initiate and maintain the Complaint Resolution Program provided to the Siting Board in the case record to address any complaints from community members. The Complaint Resolution Program shall be published on the Project's website so that residents can be able to contact a representative of Pike County Solar to address any complaints that may arise. Pike County Solar shall also submit to the Siting Board, annually from the date the project construction begins, a status report associated with its Complaint Resolution Program, providing, among other things, the individual complaints, how Pike County Solar addressed those complaints, and the ultimate resolution of those complaints, identifying whether the resolution was to the complainant's satisfaction. Once the project has commenced electric generation, within 30 days after that date, Pike County Solar shall file a final report for any unreported period.
- 34. Pike County Solar shall provide the Pikeville-Pike County–Elkhorn City Joint Planning Commission contact information for individuals within the company that can be contacted with concerns. This shall include contact information for the general public to reach individuals that can address their concerns. Pike County Solar shall update this contact information yearly, or within 30 days of any change in contact information.

Appendix A Case No. 2024-00105

- 35. The Siting Board can reconvene to enforce any of the above mitigation measures until the generation of electricity commences.
- 36. Within 30 days of entry Order, Pike County Solar shall send a copy of this Order to all the adjoining landowners who previously were required to receive notice of this Project.

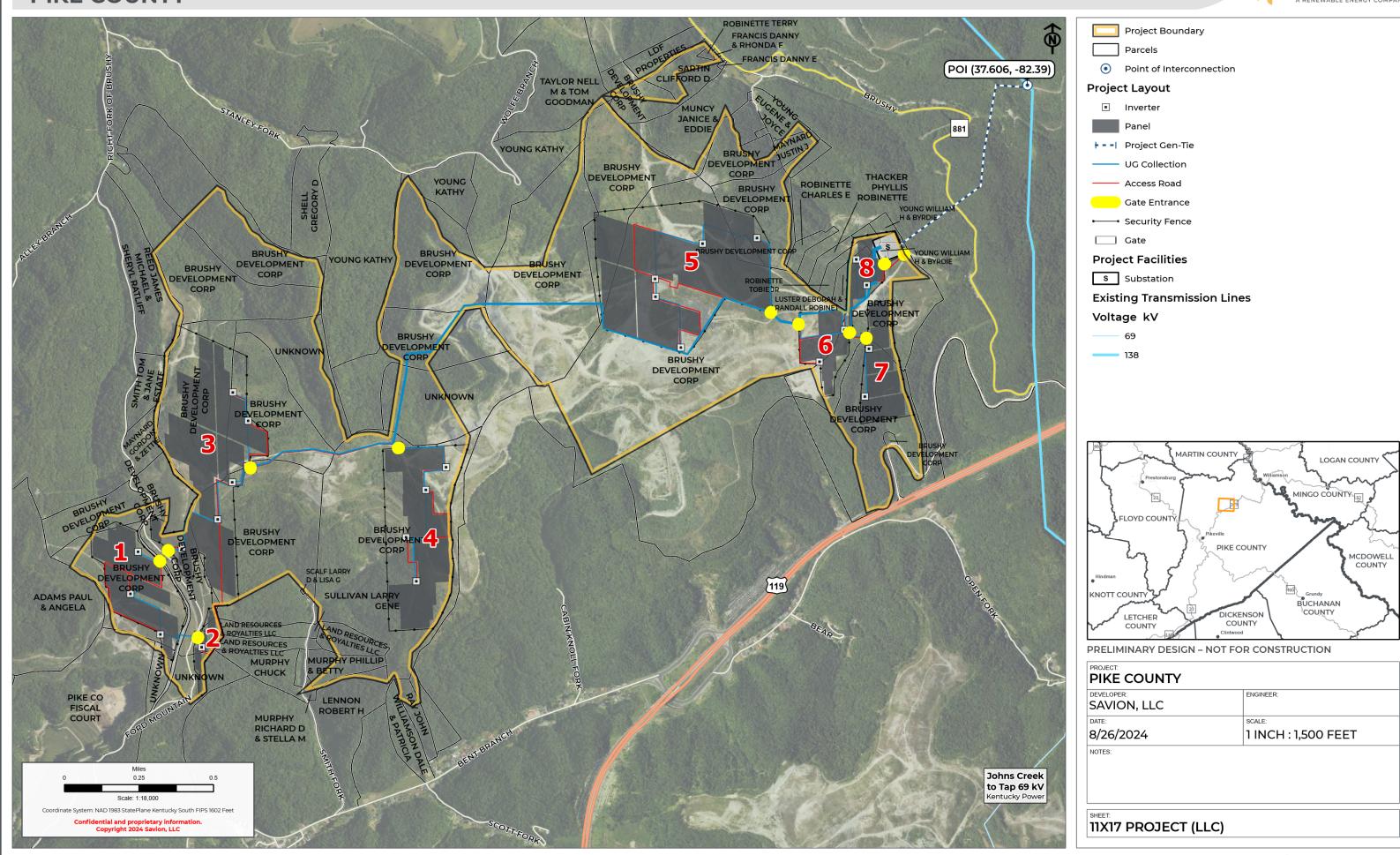
APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING IN CASE NO. 2024-00105 DATED NOV 15 2024

ONE PAGE TO FOLLOW

PIKE COUNTY





*Curtis Koons 670 Phillips Drive Pikeville, KENTUCKY 41501

*Dylan F. Borchers Bricker Graydon LLP 100 South Third Street Columbus, OHIO 43215

*Elmon Lafe Walters 209 East Cedar Drive Pikeville, KENTUCKY 41501

*Jeannine Johnson Savion, LLC 422 Admiral Blvd. Kansas City, MISSISSIPPI 64106

*Sommer L. Sheely Bricker Graydon LLP 100 South Third Street Columbus, OHIO 43215