COMMONWEALTH OF KENTUCKY

BEFORE THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING

IN THE MATTER OF:

THE ELECTRONIC APPLICATION OF BRIGHT)	
MOUNTAIN SOLAR, LLC FOR A CERTIFICATE)	
OF CONSTRUCTION FOR AN UP TO 80 MEGAWATT)	
MERCHANT ELECTRIC SOLAR GENERATING)	CASE NO. 2022-00274
FACILITY AND RELATED NONREGULATED)	
TRANSMISSION LINE OF APPROXIMATELY 4 MILES)	
IN PERRY COUNTY, KENTUCKY PURSUANT TO)	
KRS 278.700 AND 807 KAR 5:110)	

BRIGHT MOUNTAIN SOLAR, LLC'S MOTION FOR DEVIATION FROM SETBACK REQUIREMENT

Comes now Bright Mountain Solar, LLC ("Bright Mountain" or "Applicant"), by counsel, and requests the Kentucky State Board on Electric Generation and Transmission Siting ("the Board") grant a deviation from the setback requirements of KRS 278.706(2)(e) as allowed under KRS 278.704(4) for its proposed Bright Mountain Solar merchant solar electric generating facility and related nonregulated transmission line ("the Project"). In support of this motion, Applicant states as follows:

I. <u>STATUTORY AUTHORITY</u>

1. KRS 278.706(2)(e) establishes setback requirements for merchant generating facilities, such as the Project, by requiring that "all proposed structures or facilities used for generation of electricity [be] two thousand (2,000) feet from any residential neighborhood, school, hospital or nursing home facility." Because Perry County has no planning and zoning ordinances

governing relevant setback requirements, these statutory setback requirements apply. KRS 278.704(4) authorizes the Board to grant a deviation from setback requirements to allow a shorter distance upon "a finding that 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 [statutorily prescribed]."

II. <u>PROPERTIES WITHIN 2,000 FEET OF THE PROJECT</u>

2. **Exhibit A** to this Motion shows in dashed red line a buffer distance of 2,000 feet from the structures used for electricity generation. There are no schools, hospitals, or nursing homes within 2,000 feet of Applicant's proposed location of structures or facilities used for generating electricity.

3. KRS 278.700(6) defines "residential neighborhood" as "a populated area of five (5) or more acres containing at least one (1) residential structure per acre." There are three groupings of residences that have been identified as "residential neighborhoods" as described on page 2 of Tab 2 of Bright Mountain's Application for Merchant Electric Generating Facility and Related Nonregulated Transmission Line Construction Certificate ("Application") and are within 2,000 feet of proposed locations of structures or facilities used for the generation of electricity (e.g., the solar panels and the Project substation). These three groupings are as follows, as depicted in the chart attached hereto as **Exhibit B**:

 <u>Residential Neighborhood 1</u> is located to the east of the Project, along Lower Pigeonroost Road. Residential Neighborhood 1 encompasses approximately 2 acres and includes 5 residences. It should be noted that although Residential Neighborhood 1 does not encompass 5 or more acres, it was identified as a residential neighborhood as it is a cluster of 5 residences at a density greater than 1 residence per acre. The nearest proposed structure or facility used for the generation of electricity is the Project substation located approximately **1,190 feet** away from the boundary of Residential Neighborhood 1.

- <u>Residential Neighborhood 2</u> is located to the south of the Project, near the intersection of Couchtown Road and Kentucky State Route ("SR") 451. Neighborhood 2 encompasses approximately 5 acres and includes 7 residences. The nearest proposed structures or facilities used for the generation of electricity are solar panel arrays located approximately **1,210 feet** from the boundary of Residential Neighborhood 2.
- <u>Residential Neighborhood 3</u> is located south of the Project, along SR 451. Only the northeastern tip of the neighborhood is located less than 2,000 feet from the Project. Residential Neighborhood 3 encompasses approximately 31 acres (of which only approximately 8 acres are located within a 2,000-foot radius of the structures used for electricity generation) and includes 52 residences (of which only 13 are located within a 2,000-foot radius of structures used for electricity generation). The nearest proposed structures or facilities used for the generation of electricity are solar panel arrays located approximately **1,140 feet** from the boundary of Residential Neighborhood 3.

As also set forth in more detail in **Exhibit B**, because the Project Area is atop a mountaintop reclaimed coal mine, there are also significant elevation differences between the Residential Neighborhoods within 2,000 feet (which sit at the base of the mountain) and the Project Site. The relatively high elevation of the Project Site further lessens impacts that are predicted from construction and operation of the Project upon any nearby residence.

III. <u>REQUEST FOR DEVIATION</u>

4. The Board should grant a deviation from the 2,000-foot setback requirement from Residential Neighborhoods because the Project "is designed to and, as located, would meet the goals of [the cited provisions in KRS Ch. 224 and 278] at a distance closer than those provided" by statute. KRS 278.704(4).

5. In the first 15 years of its history, the Board considered several requests from setback requirements.¹ Since 2020 when applications for construction certificates for solar

¹ See Case No. 2002-00149, Application of Kentucky Mountain Power, LLC/Enviropower, LLC for a Merchant Power Plant Construction Certificate in Knott County, Kentucky near Talcum (Order 9/5/2002); Case No. 2009-00530, Application of ecoPower Generation-Hazard, LLC for a Certificate to Construct and Operate a Merchant Electric

facilities began to be filed, the Board has regularly considered and permitted deviations from the statutory setback requirements for merchant solar energy projects like the Project, subject to certain mitigation measures.²

6. To allow a deviation, the Board must make a finding that the proposed facility is designed to and, as located, would meet the goals of the designated statutes. (KRS 278.704(4)). Included in the listed statutes are the setback requirements themselves, *i.e.*, KRS 278.706(2)(e). In the *ecoPower* decision, Case No. 2009-00530, the Board stated regarding the similar setback requirements found in KRS 278.704(2), that they "were enacted to afford some level of protection for persons occupying a property adjacent to a property where a merchant generating plant is to be constructed and operated."³ Therefore, "it is the effects of the planned facility on adjoining residents that the Siting Board must consider when determining whether to grant a deviation pursuant to KRS 278/704(4)."⁴ By its express words, KRS 278.704(4) simply requires a showing that the goals of the statutes cited therein can be met with facilities at a distance less than what is statutorily provided in KRS 278.706(2)(e).

7. In the circumstances presented by this Project, the question is whether the statutory goals are met even though some structures or facilities used for generating electricity will be closer to a Residential Neighborhood than 2,000 feet. For the reasons set forth below, and as more

Generating Facility and a 69kV Transmission Line in Perry County (Order 4/22/2010 denying deviation without prejudice and Order 5/18/2010 granting deviation request); Case No. 2014-00162, Application of SunCoke Energy South Shore, LLC for a Certificate to Construct a Merchant Electric Generating Facility and Non-Regulated Transmission Line (Order 2/20/2015).

² See Case No. 2020-00040, *Turkey Creek* (Order 9/23/2020); Case No. 2020-00043, *Glover Creek* (Order 9/23/2020); Case No. 2020-00190, *Horseshoe Bend* (Order 6/11/2021); Case No. 2020-00206, *AEUG Fleming* (Order 5/24/2021); Case No. 2020-00208, *Northern Bobwhite* (Order 6/18/2021); Case No. 2020-00280, *Ashwood Solar I*, LLC (Order 6/21/2021); Case No. 2020-00272, *Flat Run Solar, LLC* (Order 10/7/2021); Case No. 2021-00029, *Martin County Solar Project, LLC* (Order 11/15/2021); Case No. 2020-00226, *Mt. Oliver Creek Solar, LLC* (Order 11/3/2021); Case No. 2020-00370, *Fleming Solar*, LLC (Order 11/24/2021); and Case No. 2020-00244, *Caldwell Solar, LLC* (Order 4/8/2022).

³ Case No. 2009-00530, *ecoPower* (Order 5/18/10 at 31).

⁴ *Id.* at 32 (referring to the 1,000-foot standard, which is inapplicable here).

completely detailed in Bright Mountain's Application, filed on September 15, 2023, the answer is yes, and the requested deviation should be granted.

IV. <u>COMPLIANCE WITH STATUTORY GOALS</u>

8. **KRS 224.10-280** requires submission of a Cumulative Environmental Assessment ("CEA") to the Kentucky Energy and Environment Cabinet ("the Cabinet") before beginning construction of an electric power plant. Applicant included a copy of its CEA as part of its Application (Application Tab 15, Attachment L) and also submitted it to the Cabinet on September 20, 2023. Applicant's CEA includes a discussion of potential impacts and mitigation plans for air pollutants, water pollutants, wastes, and water withdrawal, which will protect nearby property owners from negative impacts from the Project. By submitting a CEA to the Cabinet, the goals of KRS 224.10-280 have been met. The elements of the CEA are briefly discussed as follows:

a. Regarding air pollutants, the CEA concludes that construction of the Project will result in minimal quantities of emissions, and no air permit is required for operation of the Project. Construction activities may temporarily release fugitive air pollutant emissions (dust and other suspended particles), but these emissions will diminish or be captured by the surrounding forested buffer before reaching residences outside of the Project boundary. Creation of fugitive dust will be mitigated using Best Management Practices ("BMPs") such as such as reduced vehicle speed, application of gravel to heavily-travelled internal roadways, application of water or a dust suppressant where needed, etc. Further, because the proposed site for the Project is a reclaimed surface coal mine that is largely devoid of trees, clearing of trees and shrubs will be minimal. Any emissions from the operation of the Project would be generated by worker vehicles and maintenance equipment and would be negligible.

b. Regarding water pollutants, as discussed in more detail in the CEA and Application (Application at Tab 15, Attachment L), no resources on or directly adjacent to the site have been designated as Kentucky special-use waters by the Division of Water ("DoW"). Approximately 1.1 acres of small wetlands ranging from 0.01 to 0.30 acre will be impacted by the facility; however, none of these wetlands are anticipated to meet the definition of Waters of the United Stated ("WOTUS"), which would require the Project to obtain review and permit authorization by the U.S. Army Corps of Engineers ("USACE"). The Applicant intends to coordinate with the USACE in order to confirm this conclusion. Additionally, ten streams were identified on the site, but none will be directly impacted by the Project as all facility components will be built at least 25 feet from the streams.

i. The Project will minimize impacts to surface waters during construction by adhering to the requirements of the general construction permit KYR10, issued by the DoW. Prior to the commencement of construction activities, the Applicant will develop a storm

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water pollution prevention plan ("SWPPP") to further minimize impacts to surface waters as a result of construction.

ii. A portion of the site is mapped by the Federal Emergency Management Agency ("FEMA") as a Special Flood Hazard Area. However, no development is proposed on this area of the site, so there will be no impacts to the flood zone.

iii. Project operations may require the occasional use of fertilizers and herbicides. All such materials will be used in accordance with the manufacturer's instructions to avoid contaminating surface or ground waters.

iv. There are four mapped water wells for domestic, single household use located within the Project site. Although the Kentucky Geoportal lists each well as active, the history of the area and communications with nearby landowners indicate these wells have been sealed or are no longer functional. None of the wells are mapped as being within the panel area of the site.

v. Any hazardous materials used during construction, such as petroleum-based lubricants and hydraulic fluids, will be properly stored and used following proper techniques. The potential for spills of such materials will be minimized through adherence to a spill prevention, control, and countermeasure ("SPCC") plan developed prior to the commencement of construction activities and the wide availability of spill response kits.

c. Regarding wastes, Applicant's CEA notes that Project construction is anticipated to generate approximately 4,900 cubic yards of construction waste, consisting primarily of wood pallets, cardboard, miscellaneous packing materials, construction scrap, and general refuse. Waste materials will be recycled if possible, and non-recyclable solid materials will be removed from the Project site and disposed of at a licensed solid waste disposal facility. Waste generated from hazardous materials, such as cleaning fluids, degreasers, herbicides, pesticides, oils, and fuels 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.

d. Finally, regarding water withdrawal, construction and operation of Applicant's solar electric generating facilities are not anticipated to be water intensive. The Project plans to use either existing on-site wells if they are functional, existing drainage basins, or an offsite location to obtain water for the site. If necessary, a new on-site water well may be established. For Project operations, water may be needed to wash the panels during extended dry periods in the region. However, 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. The Applicant estimates this could occur once a year and would require approximate 65,000 gallons of water across the facility. For office and management activities, water usage will be comparable to a single-family home.

9. **KRS 278.010** sets forth definitions to be used for KRS 278.010 to 278.450, 278.541 to 278.544, 278.546 to 278.5462, and 278.990 — none of which are directly applicable to the Applicant or the Project. To the extent relevant,⁵ Applicant has satisfied any goals of KRS 278.010 by preparing and presenting its Project proposal and Application in terms consistent with the statutory definitions.

10. **KRS 278.212** requires the filing of plans and specification for electrical interconnection with merchant electric generating facilities and imposes the obligation upon a

⁵ As the first section in the chapter, KRS 278.010 may have been mistaken for a "purposes and goals" statement for Chapter 278. Or its inclusion in the KRS 278.704(4) list may have been to help discern the goals of the other Chapter 278 sections listed.

merchant electric generating developer for any costs or expenses associated with upgrading the existing electricity transmission grid as a result of the additional load caused by the merchant electric generating facility. Applicant anticipates having an executed interconnect agreement with Kentucky Power, a wholly-owned subsidiary of American Electric Power, Inc. (AEP), in approximately 2024 to connect the existing transmission grid via a 69-kilovolt ("kV") circuit breaker and pay the related costs.⁶ As designed and as located, Applicant's proposed Project therefore meets the goals of KRS 278.212.

11. **KRS 278.214** governs the curtailment of service and establishes the progression of entities whose service may be interrupted or curtailed pursuant to an emergency or other event. To the extent this section applies to the operation of Applicant's proposed generation or the Project, Applicant commits to following all appropriate and legally binding operating procedures. The Project is thus designed and located to meet the goals of KRS 278.214.

12. **KRS 278.218** governs certain transfers of utility assets having an original book value of \$1 million or more. Applicant is not a utility as defined in KRS 278.010(3), and therefore, this statute does not apply to Applicant. However, to the extent Board approval may at some time be required for change of ownership or control of assets owned by Applicant or its parent company, Applicant will comply with the applicable rules and regulations that govern its operation.

13. **KRS 278.700** – **KRS 278.716** governs the Siting Board's jurisdiction and process. Applicant's application and timely participation in the present proceeding demonstrates that the Project is designed to, and as located, would meet the goals of KRS 278.700 *et seq.*, including the allowance for deviation from setback requirements in KRS 278.704(4). Moreover, the mitigation measures discussed in the Application relative to noise, traffic, and other impacts of the proposed

⁶ See Application Tab 9 Attachment H.

Project are additional steps Applicant has committed to take to minimize the effects of the Project on the potential Residential Neighborhoods discussed herein (as well as on the broader surrounding community). Finally, Applicant has selected a location for the Project that was previously a mountain-top surface coal mine site, returning land to a use that continues to support energy security. This is an additional aspect of the proposed Project that demonstrates "the proposed facility is designed to and, as located, meets 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 [statutorily prescribed]."⁷

V. MITIGATION EFFORTS

14. The Sound Assessment attached to the Applicant's Site Assessment Report (Application Tab 12, Exhibit G) concludes that noise associated with the Project during operations will be equivalent to the sound levels in a quiet residential area. (*Id.* at 8). The highest predicted operational sound level in residential areas will be 42 A-weighted decibels ("dBA") and will occur in the daytime when the Project's inverters are operating at full capacity. (*Id.* at 6). That level is at a participating residence; the highest predicted sound level at a non-participating residence is 37 dBA. Construction noise may increase above background sound levels and be audible at times, however it will be temporary and louder activities will be restricted to daytime hours. (*Id.* at 5). Further, the proposed site of the Project is located at the former site of a surface coal mine, situated on top of land elevated 1,435 feet on the east and 970 feet on the west and surrounded by forest. (Application Tab 12 Part 5, Exhibit H at pp. 5). This will ensure that sound levels are diminished

⁷ KRS 278.704(4).

to an even greater extent than is represented in the Sound Assessment. As more fully reported in the Site Assessment Report and Sound Assessment:

a. Noise will be present on the Project site during construction; however, the sounds levels of the equipment needed to build the Facility are anticipated to be consistent with general construction equipment used in other infrastructure projects. (*Id.* at 3). Due to the size of the Facility, construction sound will reach the maximal levels presented in the report for short periods of time. Additionally, louder construction activity will be limited to the hours of 7:00 AM to 9:00 PM, Monday through Saturday. (*Id.* at 5).

b. Pursuant to the current Facility layout, the substation transformer will be approximately 1,200 feet away from the outer-boundary of the closest Residential Neighborhood. At this distance, the closest residence within a Residential Neighborhood will experience a sound level of roughly 25 dBA. (Application Tab 12 Part 5, Exhibit G at pp. 6).

15. As discussed in Applicant's Site Assessment Report (Application Tab 12 Part 5, Exhibit H), the visual impact of the Project on neighboring property owners is low and is mitigated by existing vegetative buffers surrounding the proposed site. (*Id.* at 12).

a. According to the viewshed analysis described in the Visibility Assessment, there is a potential to view the Project on 286-acres in a two-mile radius from the Project. (*Id.* at 10). Further, a field assessment revealed areas with visibility of the Project are substantially fewer and smaller than the viewshed analysis predicted due to surrounding vegetation. (*Id.* at 12). In areas that will have visibility of the Project, only small portions of the facility may be in view. (*Id.* at 13).

b. A Glare Report (Application Tab 12 Part 5, Exhibit I) was prepared for the Project and found that no Residential Neighborhoods surrounding the site would be affected by glare from the facility. (*Id.* at 9). This is due to the existing vegetative screen that surrounds the facility (*id.*) and the Project's placement on a former mountain-top removal coal mine site, which puts it at a higher elevation than any of the surrounding Residential Neighborhoods.

16. As discussed in the Traffic Study included in the Applicant's Site Assessment Report (Application, Tab 12 at Exhibit F), traffic will temporarily increase during the construction phase of the Project. The operation of the facility will not significantly increase traffic within the vicinity of the Project. Mitigation measures will be employed during construction to reduce the contribution of fugitive dust and other airborne materials. (Application Tab 12, Exhibit F at pp. 9-10). These and other measures related to traffic will be employed by the Applicant to mitigate potential Project impacts.

VI. <u>CONCLUSION</u>

The Project as designed and including the proposed mitigation measures will protect residents in the three residential groupings from any adverse impact that may result from the proposed Project being located closer than 2,000 feet.

WHEREFORE, because the proposed Project as designed and located, with proposed mitigation measures 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 the three residential groupings

than 2,000 feet, the Applicant respectfully requests a deviation from the setback requirements of KRS 278.706(2)(e).

Respectfully submitted,

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