

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

In the Matter of:

ELECTRONIC APPLICATION OF ASHWOOD)	
SOLAR I, LLC FOR A CERTIFICATE OF)	
CONSTRUCTION FOR AN APPROXIMATELY 86)	CASE NO.
MEGAWATT MERCHANT ELECTRIC SOLAR)	2020-00280
GENERATING FACILITY IN LYON COUNTY,)	
KENTUCKY PURSUANT TO KRS 278.700 AND)	
807 KAR 5:110)	

ORDER

On December 22, 2020, Ashwood Solar I, LLC (Ashwood Solar I or Project) filed an application requesting a Certificate of Construction to construct an approximately 86-megawatt alternating current (MWac) solar photovoltaic electric generating facility to be located at 3715-3483 US-641, Fredonia, Lyon County, Kentucky.¹ Ashwood Solar I is a limited liability company organized under the laws of Delaware with a principal place of business in Chicago, Illinois.² The total acreage within the project boundary is 1,506.802 acres that has been predominantly used as row crop and winter wheat production.³ The on-site equipment will consist of crystalline solar panels, inverters, a substation transformer, and an associated wiring and balance of system.⁴ The facility's output will

¹ Application at 1.

² *Id.*

³ Ashwood Solar I's Response to BBC Consulting's First Request for Information (filed Feb. 25, 2021), Item 1.

⁴ Application, Volume 1, Section 2, Description of Proposed Site at 4.

be transmitted and sold in the wholesale power market through the existing transmission line that crosses the property, with the majority of the output sold pursuant to a contract with the Kentucky Municipal Energy Association.⁵

Pursuant to an Order issued on January 13, 2021, a procedural schedule was established for the orderly review and processing of this matter. The procedural schedule provided for two rounds of discovery upon Ashwood Solar I's application, a deadline for the filing of the consultant's report, and an opportunity for Ashwood Solar I to submit comments in response to the consultant's report. The January 13, 2021 Order also scheduled a hearing for the matter which resulted in extending the statutory deadline for the processing of this matter from 120 days to 180 days from the date of the filing of the application.

Pursuant to 807 KAR 5:110, Section 4, requests to intervene had to be filed within 30 days from the date of the filing of the application. Also, pursuant to 807 KAR 5:110, Section 6, the Siting Board on its own motion or any party to this case may file a motion requesting an evidentiary hearing within 30 days from the date of the filing of the Application. Under KRS 278.712(1), a request for a local public hearing may be requested by at least three interested persons that reside in Lyon County or from the local planning and zoning commission, mayor of the city or county fiscal court of a jurisdiction where the solar facility is proposed to be located. Lastly, pursuant to 807 KAR 5:110, Section 8, a request for a public meeting must be made within 30 days from the date of the filing of the application. There have been no requests for intervention in this matter,

⁵ Application at 1.

no requests for an evidentiary hearing, and no requests for a public meeting or a local public hearing in this matter.

Ashwood Solar I has filed responses to multiple rounds of discovery in this matter. On March 10, 2021, Ashwood Solar I filed a motion requesting deviations from certain setback requirements set forth in KRS 278.704(2). Pursuant to KRS 278.708(5), the Siting Board retained a consultant, BBC Research and Consulting (BBC), to review Ashwood Solar I's site assessment report (SAR) and to provide recommendations concerning the adequacy of the SAR and propose mitigation measures. A site visit was held on February 19, 2021. The BBC Report was filed on April 7, 2021. Ashwood Solar I submitted its response to the BBC Report on April 23, 2021. A formal evidentiary hearing was held on May 11, 2021. Ashwood Solar I filed responses to post-hearing data requests on May 25, 2021. The Siting Board received no public comments regarding the proposed solar facility. The Siting Board likewise heard no public comments at the beginning of the May 11, 2021 formal evidentiary hearing. The matter now stands submitted for a decision.

PROPOSED ASHWOOD SOLAR I SOLAR FACILITY

The proposed solar facility will be located at 3715-3483 US-641, Fredonia, Lyon County, Kentucky which is one mile south of Bakers, Kentucky, along KY 641.⁶ The proposed site totals approximately 1,506 acres.⁷ Ashwood Solar I has entered into lease agreements with seven adjoining landowners to establish site control.⁸ Ashwood Solar I

⁶ Application Pleading at 1 and Volume 1, Section 2, Description of Proposed Site at 4.

⁷ Ashwood Solar I's Response to BBC Consulting's First Request for Information (filed Feb. 25, 2021), Item 1.

⁸ Ashwood Solar I's Response to Siting Board Staff's First Request for Information (filed Feb. 25, 2011), Item 25.

states that a fence meeting the National Electric Safety Code (NESC) requirements, which is typically a six-foot fence with razor or barbed wire at the top, will enclose the facility.⁹ Project entrance gates are anticipated to be locked with a standard keyed or combination lock with emergency personnel provided a key or combination for access. The solar facility has a rated capacity of 86 MWac and will be connected to an onsite existing transmission line owned by Louisville Gas and Electric (LGE)/Kentucky Utilities (KU).¹⁰ Ashwood Solar I states that the project area is in two electric service territories, Kenergy and KU, and to the extent needed, electric service during construction may be provided by either Kenergy or KU, based on the location of the temporary laydown yard during construction, and location of substation during operations.¹¹

Ashwood Solar I notes that the area surrounding and within the project site consists of residential, agricultural, and correctional land use.¹²

Pursuant to KRS 278.706(2)(c), Ashwood Solar I notified 37 landowners whose property borders the proposed solar facility site via certified mail on December 14, 2020.¹³ Ashwood Solar I also published notice of the proposed solar facility in the *Herald Ledger*, the newspaper of general circulation in Lyon County, on December 9, 2020.¹⁴

⁹ Application Volume 1, Section 2, Description of Proposed Site at 4.

¹⁰ Application Volume 1, Section 7, Efforts to Locate Near Existing Electric Generation at 12.

¹¹ Ashwood Solar I's Response to Siting Board Staff's First Request for Information (filed Feb. 25, 2021), Item 24.

¹² Application Volume 2, Section 1, Description of Proposed Site at 4.

¹³ Application Volume 1, Section 3, Public Notice Evidence at 5, and Attachment B, Proof of Notice of Application.

¹⁴ *Id.*

In addition, Ashwood Solar I also engaged in public involvement program activities, as required by KRS 278.706(2)(f), prior to the filing of its application. Ashwood Solar I informs that it has been active in the Project area since fall of 2016.¹⁵ During that time Ashwood Solar I notes that it has met with landowners, stakeholders, and local government officials about the proposed 86-MW solar power project.¹⁶ Ashwood Solar I also states that it held a public meeting on September 17, 2020, at the Lyon County Old Courthouse to inform the public about the solar project and receive comments from the public.¹⁷ Ashwood Solar I first published notice of the public meeting in the September 2, 2020 edition of the *Herald Ledger*, with two dates listed for the meeting. In order to ensure members of the public knew the correct date for the meeting, a corrected notice was filed September 16, 2020 in the *Herald Ledger*.¹⁸ Letters were also mailed to all adjoining landowners notifying them of the public meeting.¹⁹ Members of the public were able to attend the September 17, 2020 meeting virtually, due to COVID-19 concerns.²⁰

DISCUSSION

I. Requirements Under KRS 278.708 – Site Assessment Report

KRS 278.704(1) states that “[n]o person shall commence to construct a merchant electric generating facility until that person has applied for and obtained a construction certificate for the facility from the [Siting] [B]oard.” KRS 278.708 requires a SAR be

¹⁵ Application Volume 1, Section 6, Public Notice Report at 8–11.

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.*

prepared and filed with an application. The SAR should provide: (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 facility; (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 implemented by the applicant to minimize or avoid adverse effects identified in the site assessment report.

Detailed Site Description

In addition to the description of the proposed Project as described above, Ashwood Solar I states the Project will be situated on land which can be generally described as acreage historically used for row crop and winter wheat production.²¹ Ashwood Solar I further states that 23 percent of the surrounding acreage is defined as agricultural/residential, another 46 percent is purely agricultural, and 27 percent is defined as correctional.²² The remaining property is defined as purely residential.²³

Parcels used for residential purposes are primarily located east and southeast of the proposed site, while agricultural and agricultural/residential parcels are located north, east, southeast, south, and west of the site. The six large lot parcels classed as

²¹ Application Volume 2, Site Assessment Report, Section 1, Description of Proposed Site at 3.

²² *Id.*

²³ *Id.*

agricultural/residential range in distance from 200 feet to 1,445 feet from the nearest solar panel. The 21 adjoining residential parcels range in distance from 126 feet to 2,070 feet from the nearest solar panel. One residential parcel is within 200 feet of a proposed solar panel.

Ashwood Solar I states there will be as many as six proposed access points, or access roads, which will allow entrance to different areas of the property during construction and operations. Those include two access points on US 641; two from KY 1943; one from KY 3169; and one from Coleman-Doles Road. All site entrances will be gated and locked with standard keyed or combination locks and emergency personnel provided keys and combinations for entrance. Security fencing, meeting NESC requirements, standing six feet tall with three strings of barbed wire at the top will enclose the facility during construction and operation. The solar facility's electrical needs will be served by Kentucky Utilities during construction and operation via the 161 kV North Princeton line which intersects the property's southern boundary.

The BBC Report concludes that Ashwood Solar I has generally complied with the requirements for describing the facility and a site development plan, as required by KRS 278.708. The report recommends the following mitigation measures:

1. Ashwood Solar I should continue discussions with Texas Gas Transmission to finalize encroachment and crossing agreements as soon as possible so the exact location and characteristics of internal roadways can be designed to meet weight and frequency limits and other applicable crossing requirements.

2. Ashwood Solar I should ensure that the project is engineered and designed in a manner that meets all vehicular weight, frequency limits, or other applicable crossing

requirement of the pipeline company and also the U.S. Department of Transportation's Pipeline and Hazardous Materials Administration.

Compatibility with Scenic Surroundings

Ashwood Solar I states the proposed solar facility is located in Lyon County, Kentucky, one mile south of Bakers, Kentucky along Highway 641.²⁴ According to Ashwood Solar I, the project will be situated on approximately 1,521 acres historically utilized for row crop and winter wheat production.²⁵ Adjoining land use is rural and agricultural with wheat, corn, and soybean farming.²⁶ Small forested areas exist throughout the proposed site.²⁷

Ashwood Solar I asserts that its solar facility is a passive use of the land that would blend in with rural, agricultural surroundings.²⁸ Ashwood Solar I states the height of the solar panels, which are all less than 15 feet high, would have a similar visual impact to a typical greenhouse and lower than a single-story residential home.²⁹ Ashwood Solar I notes that, as compared to the proposed solar facility, if the subject property were developed with single family housing, that development would have a great visual impact

²⁴ Application Volume 2, Site Assessment Report, Section 2, Compatibility with Scenic Surroundings at 5.

²⁵ *Id.*

²⁶ Application Volume 3, Environmental Site Assessment, Section 1.0, Summary at 7.

²⁷ *Id.*

²⁸ Application Volume 2 Exhibit A, Site Assessment Report, Property Value Impact Report at 110.

²⁹ *Id.*

on the surrounding area given that a two-story home with an attic could be three to four times as high as the proposed panels.³⁰

While Ashwood Solar I notes some vegetative buffering already exists on site, Ashwood Solar I has met with adjoining landowners to address concerns and will place vegetative buffers in specific locations to ease visual impact concerns.³¹ This buffering will consist of two staggered rows of evergreen shrubs, approximately 15 feet wide and at least three feet in height at the time of planting.³²

The BBC Report finds the project site is primarily agricultural and historically used for row cropping and winter wheat production. Much of the adjoining acreage is either agricultural or part of the nearby Western Kentucky Correctional Complex. The report finds the topography of the landscape is gently sloping, with the project itself on relatively flat ground, creating little visual buffering for neighboring properties.

The BBC Report concludes the proposed facility would not be incompatible with the surrounding area from a scenic standpoint. The report notes Ashwood Solar I's plans to install vegetative buffers along the perimeter of the property, and the relatively low profile of the solar facilities infrastructure. BBC also notes Ashwood Solar I was amenable to potential relocation of solar panels if it was practicable and economically feasible. The BBC report recommends the following mitigation measures to address visual impacts:

³⁰ *Id.*

³¹ Application Volume 2, Site Assessment Report, Section 2, Compatibility with Scenic Surroundings at 5.

³² *Id.*

1. BBC agrees with Ashwood Solar I's proposal to plant a vegetative buffer "where there are potential visual impacts created by the facility..." This buffer shall consist of two staggered rows of evergreen shrubs at least three feet high at the time of planting, approximately 15 feet wide.

2. Ashwood Solar I should complete screening plan agreements with nearby homeowners as stated in Section 2 of the SAR to address their general concerns about viewshed impacts by limited tree clearing and planting vegetative buffers to further buffer viewshed concerns.

3. Ashwood Solar I must carry out the screening plan and make sure the proposed new vegetative buffers are successfully established and develop as expected over time.

Having reviewed the records, the Siting Board finds that the passive characteristics of the proposed solar facility combined with the vegetative buffers and other mitigation measures proposed by Ashwood Solar I will mitigate the effects the proposed facility will have on the scenic surroundings of the site, including the exclusion zones discussed at the hearing in this matter and reflected in the map provided in post-hearing data responses. The physical characteristics of the proposed solar facility also do not pose any adverse impact to the scenic surroundings given the solar panels will have a lower profile than most single-family homes.

The Siting Board does have concerns the general topography of the area creates the likelihood of visual disturbance. Although Ashwood Solar I has committed to coordinating with neighboring property owners who raise concerns about the visual impact of the solar facility to provide visual buffering or other mitigation measures when

appropriate and reasonable, the Siting Board finds that such a commitment does not provide reasonable assurance the concerns of neighboring landowners will be adequately addressed as it leaves the decision in the sole hands of Ashwood Solar I without any oversight. The Siting Board finds the proposed mitigation measures are reasonable and, therefore, will require Ashwood Solar I to implement the mitigation measures identified above with the additional mitigation measures outlined in Appendix A to this Order.

Impact on Property Values

With respect to impact on property values, Ashwood Solar I submitted a Property Value Impact Report from a certified real estate appraiser that found that, based upon a comparative analysis, the solar facility will have no impact on the property values of abutting or adjacent residential or agricultural properties. The report indicates that the solar facility would function in a harmonious manner with the nearby surroundings, which are mostly agricultural, and that operation of the solar facility would not generate the level of noise, odor, or traffic impacts to negatively impact the nearby surroundings as compared to a fossil fuel generating facility or other industrial facility.³³

The BBC Report notes that the central issue with respect to impact on property values is whether, and to what extent, the development and operation of the Ashwood Solar I facility will cause nearby property values to change. The BBC Report reviewed Ashwood Solar I's Property Value Impact Report, noting that the report contained a comparative study analyzing data from numerous solar facilities across the country of property values in proximity to such facilities with similar homes which are not in close

³³ See Application Volume 2, Site Assessment Report, Exhibit A, Property Value Impact Report at 1.

proximity. The BBC Report states that the analysis performed on behalf of Ashwood Solar I is similar to the approach by which appraisers commonly estimate residential property values. BBC also reviewed recent studies and articles on this subject and notes that no data or analysis has been provided to support the contention that solar developments have had an adverse impact on property values. The BBC Report points to a 2018 study conducted by the LBJ School of Public Affairs at the University of Texas, which involved a survey of public sector property appraisers in 430 counties with commercial solar facilities. This study found that a majority of survey respondents estimated a value impact of zero and geospatial analysis showed that relatively few homes would be impacted. The BBC Report also reviewed a 2020 study completed by economists at the University of Rhode Island, which found that in areas of high population density, houses within a one-mile radius depreciate by about 1.7 percent following construction of a solar array. However, the BBC Report states these findings were specific to solar sites in suburban areas. There was found to be no statistically significant impact on home prices in rural settings such as the areas surrounding the proposed Ashwood Solar I facility. Based upon a review of Ashwood Solar I's SAR, discovery responses, independent research, and information collected from the site visit, the BBC Report concludes that the Ashwood Solar I facility will unlikely have any meaningful impacts on the property values of adjacent properties or other properties near the solar facility.

Having reviewed the record, the Siting Board finds that there is sufficient evidence to conclude that the proposed Ashwood Solar I facility will more than likely not have any adverse impact on nearby property values. The characteristics of the solar facility's

operations are passive in nature and do not produce any air, noise, waste, or water pollution nor any traffic issues during operations.

Impact on Roads, Railways, and Fugitive Dust

With respect to the impact on roads, railways, and fugitive dust, Ashwood Solar I's Noise and Traffic Study as part of its SAR notes the proposed solar site will have two access points on both US 641 and KY 1943 and single access points on Coleman-Doles Road and KY 3169. The major roads to be used to access the facility are anticipated to be KY 1943, KY 3169 and US 641. Ashwood Solar I states that it does not intend to use railways for any construction or operational activities.³⁴ Ashwood Solar I confirms it will comply with all signage and traffic lights required by the Kentucky Department of Transportation and any other governmental agencies.³⁵

It is expected that construction will take from 8 to 12 months to complete the solar facility.³⁶ Data from the Kentucky Transportation Cabinet (KYTC) Division of Planning estimated that an average of 2,500 vehicles per day (VPD) use the stretch of US 641 north of the proposed site, while 2,550 VPD use the stretch of US 641 on the site's northern boundary. Approximately 3,100 VPD use the stretch of US 641 south of the site. KY 1943 has a daily volume of 140 VPD, while KY 373 has a daily traffic volume of 300 VPD.³⁷

³⁴ Application Volume 2, Site Assessment Report, Section 1, Description of Proposed Site at 4.

³⁵ Ashwood Solar I's Response to Siting Board Staff's First Request for Information (filed Feb. 25, 2021), Item 13.

³⁶ Application Volume 2, Site Assessment Report, Exhibit C, Noise and Traffic Studies, Traffic Impact Study at 5.

³⁷ *Id.* at Figure 2.

Ashwood Solar I anticipates that during construction, approximately 80 to 100 workers will access the site each day, on average, with 150 workers at peak.³⁸ Ashwood Solar I's Noise and Traffic Study shows that KY 1943, KY 3169, and US 641 will continue to operate at an acceptable level of service during worst-case scenario construction peak traffic.

The Noise and Traffic Study further finds that after construction is complete, the future traffic demand related to this project will be less than a typical single-family home. During operations, the facility will have a maximum of eight employees to staff the solar site. Those employees will work during the week from 7 a.m. until 3:30 p.m. Ashwood Solar I further states that employees will be in mid- or full-sized trucks and will contribute less to vehicle traffic than a typical single-family home. This additional volume of daily traffic is considered negligible and the operational phase of the project will have no measurable impact on the traffic and/or transportation infrastructure.³⁹

Although Ashwood Solar I states that no significant, adverse traffic impacts are expected during project construction or operation, it has acknowledged that using mitigation measures such as ridesharing between construction workers, using appropriate traffic controls or allowing flexible working hours outside of peak hours could be implemented to minimize any potential for delays during the AM and PM peak hours.⁴⁰

³⁸ Ashwood Solar I's Response to Siting Board's First Request for Information (filed Feb. 25, 2021), Item 14.

³⁹ Application Volume, Site Assessment Report, Exhibit C, Noise and Traffic Studies, Traffic Impact Study at i.

⁴⁰ *Id.* at 7. See *also* Application, Volume 2, Section 5, Effect on Road, Railways, and Fugitive Dust at 8.

With respect to road degradation, Ashwood Solar I states that generally, trucks and equipment arriving on a daily basis at the Project site will weigh no more than 46 tons (including fully loaded concrete trucks, loaders, and equipment delivery trucks). If required for civil work, an oversized excavator or articulated dump truck might weigh as much as 90 tons.⁴¹ The heaviest piece of equipment delivered to the Project site will be the substation transformer. This piece of equipment for a project of this size can weigh in the range of 70-80 tons, and the transportation vehicle for the transformer weighs an estimated 20 tons. An estimate of the total weight of the substation transformer and its delivery vehicle is therefore 100 tons. There will be one substation transformer delivery for the Project.⁴²

Ashwood Solar I recognizes construction and associated land disturbance associated with the proposed project may temporarily contribute airborne materials. However, Ashwood Solar I states the Project will utilize Best Management Practices such as: appropriate revegetation measures, application of water, or covering of spoil piles, to minimize dust.⁴³ Additionally, open-bodied trucks transporting dirt will be covered while moving. During construction activities water may be applied to internal road system to reduce dust generation. Water used for dust control is authorized under the Kentucky Pollutant Discharge Elimination System (KPDES) as a non-storm water discharge activity, which will be required for the proposed project.⁴⁴ Ashwood Solar I has no plans for paving

⁴¹ Ashwood Solar I's Response to Siting Board Staff's First Request for Information (filed Feb. 25, 2021), Item 17.

⁴² *Id.* Item 19.

⁴³ *Id.*

⁴⁴ *Id.*

or graveling internal roads. The road design is expected to be compact native material but may temporarily substitute gravel roads when necessary to improve drivability during construction when absolutely necessary.⁴⁵ Water would be used to reduce fugitive dust based on an as-needed basis. Should construction take place during very dry summer months so that dust may leave the site, a water truck would be deployed to spray down roads and construction areas. This would be continued until fugitive dust is sufficiently mitigated.⁴⁶

The BBC Report indicates during the construction period, there could be noticeable effects on traffic volumes during the beginning of the day and end of the day peak periods, particularly on US 641. There is also a potential for impacts to traffic flows on KY 1943 if workers access the site through the two proposed access points along the road during day and end of the day peak periods. Additional short-term transportation impacts are possible when Ashwood Solar I transports the substation transformer to the site.

The BBC Report finds that although no significant adverse transportation impacts are anticipated, it recommends Ashwood Solar I pursue mitigation measures outlined in their SAR, such as ridesharing between construction workers, using appropriate traffic controls or allowing flexible working hours outside of peak hours to minimize any potential delays during AM and PM peak hours.

The BBC Report further recommends the following mitigation measures to ensure that impacts to roadways will be kept to a minimum:

⁴⁵ Ashwood Solar I's Response to Siting Board Staff's First Request for Information (filed Feb. 25, 2021), Item 22.

⁴⁶ *Id.* Item 23.

1. Ashwood Solar I should continue discussions with Texas Gas Transmission to finalize encroachment and crossing agreements as soon as possible so the exact location and characteristics of internal roadways can be designed to meet weight and frequency limits and other applicable crossing requirements.

2. Ashwood Solar I must ensure that all site entrances and boundaries have adequate signage, particularly in locations visible to the general public, local residents, and business owners.

3. Ashwood Solar I should contact the Kentucky Transportation Cabinet as soon as possible to discuss the transportation requirements and possible restrictions for transportation of the substation transformer on US 641. If the route requires on-site assessment by KYTC before approval and permitting, Ashwood Solar I should allow as much time as possible for that process to occur.

The Siting Board agrees with the mitigation measures recommended in the BBC Report, which were generally accepted by Ashwood Solar I, and will require Ashwood to implement those measures. To further ensure that traffic impacts during construction are kept to a minimum, the Siting Board will also require Ashwood Solar I to implement the mitigation measures outlined in Appendix A.

Anticipated Noise Level

According to Ashwood Solar I's Noise and Traffic Study,⁴⁷ There are 39 residences including a combination of single family homes and mobile homes are located within 1,000 feet of the project boundary.⁴⁸ The majority of these occur along US 641

⁴⁷ Application Volume 2, Site Assessment Report, Exhibit C, Noise and Traffic Studies, Noise Study at 2.

⁴⁸ *Id.*

within and near a neighborhood located along Breezy Loop near the intersection of US 641 and New Bethel Church Road. The nearest receptors are approximately 35 feet from the project boundary. According to the proposed site plan, with setbacks these nearby receptors actually range from approximately 120 feet to more than 600 feet away from the proposed solar panels. Proposed inverters are located even further away with the nearest being approximately 400 feet from a dwelling and most being over 1,000 feet away.⁴⁹ New Bethel Baptist Church is located over 500 feet from the southern edge of the Project where the proposed substation and potential battery storage are planned to be installed.⁵⁰ Ashwood Solar I has requested a deviation from the 2,000-foot setback requirement discussed in more detail below.⁵¹

Ashwood Solar I has stated that it will be placing the 29 inverters which emit noise at a level of 67 dB at ten meters and will be located approximately 500 feet from the closest receptor.⁵² At this distance the anticipated sound level of the inverters would be approximately 49 dBA. The Substation is expected to produce a sound level of 60 dBA at the source and the nearest noise receptor will be approximately 600 feet from the source.⁵³ Ashwood Solar I will use tracking motors on the solar panels that will move the panels and would operate no more than one minute out of every 15-minute period. The sound typically produced by panel tracking motors is approximately 78 dB at ten meters.⁵⁴

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ Applicant's Motion for Deviation from Setback Requirements (filed Mar. 10, 2021).

⁵² Application Volume 2, Site Assessment Report, Exhibit C, Noise and Traffic Studies, Noise Study at 8.

⁵³ *Id.* at 6.

The noise produced by the tracking system will be approximately 67-70 dBA at the nearest receptor.⁵⁵

Ashwood Solar I's Noise and Traffic Study indicates that the primary source of noise from the surrounding area is similar to the Project site with adjacent farms producing agricultural sounds related to tractors, farm machinery, trucks, ATVs and irrigation. Wildlife and livestock also contribute to the local noise including cattle, insects, birds and frogs. In addition, US 641, State Highway 1943, and Coleman Doles Road contribute to the traffic noise in the area. KYTC is in the planning and design stage for a realignment of US 641. Within the project area, the current preferred alignment includes constructing a highway on new location approximately 3,500 feet to the east of the current alignment. Both the old and new alignments bisect the Project. Approximately 4,000 vehicles per day use this stretch of roadway and could increase to 5,300 by 2030 on the new alignment. Construction is currently scheduled to begin in spring 2022 according to the KYTC 2019.⁵⁶

Ashwood Solar I provides that construction of the facility is expected to last 12–18 months.⁵⁷ The noisiest phase of construction is anticipated to be the foundations phase due to pile driver use.⁵⁸ Foundations/Poles would be the loudest activity during this time, which generates a maximum noise level between 96 dBA and 101 dBA at 50 feet from

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ Applicant's Motion for Deviation from Setback Requirements, Exhibit 2, at 1.

⁵⁸ Application Volume 2, Site Assessment Report, Exhibit C, Noise and Traffic Studies, Noise Study at 4.

the source.⁵⁹ Ashwood Solar I further notes that construction work is expected to progress across the site such that equipment and activities would only be in a single area for a short period and that the potential for adverse noise impacts at any one receptor is expected to only occur for a short period.⁶⁰

Ashwood Solar I states that it did not find any relevant county or state noise ordinance or standard that was applicable.⁶¹ Ashwood Solar I proposes to have construction activities daily during the hours of 7 a.m. to 10 p.m.⁶²

Ashwood's Noise and traffic study analysis concludes that the ambient daytime sound level for the area surrounding this project is anticipated to be between 49 and 67 dBA.⁶³ It is anticipated at 300 foot the sound level contribution from the operation of a Central Inverter will be approximately 47.6 dBA, at 150 foot the sound level contribution from the operation of the Substation will be approximately 37.0 dBA and String Inverters, if used in place of Central Inverters, would be approximately 40.0 dBA.⁶⁴

The BBC Report notes that noise issues stem from construction activities and operational components of the solar facility. During construction, noise will include graders, bulldozers, excavators, dozers, dump trucks, and other equipment. During operation of the proposed solar facility, noise will be emitted from transformers, inverters,

⁵⁹ *Id.* at 5.

⁶⁰ *Id.* at 7.

⁶¹ *Id.* at 3.

⁶² *Id.* at 7.

⁶³ *Id.*

⁶⁴ *Id.* at 5.

and the tracking motors which rotate the panels to track the sun. The report further notes that distance from noise emitters to noise receptors also matters, since the further a noise receptor from a noise emitter, the less noise impact overall. Lastly, the report also points out that neither the state nor Lyon County have a noise ordinance. The report utilizes the noise recommendations generated by the Centers for Disease Control and Prevention (CDC) to gauge acceptable levels of sound. According to the CDC, the noise level from a whisper is 30 dBA, while a normal conversation has dBA of 60. The CDC notes that noise over 70 dB can damage hearing over a prolonged period and that noises over 120 dB can cause immediate harm to ears.

The BBC Report concludes that the noise generation from a solar facility's panel tracking motors and inverters is not substantial, particularly when compared with conventional power plants and associated equipment. BBC concludes that noise levels at the proposed facility during normal operations will not be a significant concern. The report finds that the noise produced by pile driving process will affect people living or working in the vicinity. The noise and traffic study estimated the sound level to be at 70 dBA and this is above the threshold the CDC sites as having potential to damage hearing if continued over prolonged periods of time. Also the National Institute for Occupational Safety and Health's (NIOSH) recommends that the occupational noise exposure should be limited to sounds of no more than 83 dBA. Based on sound attenuation estimates across open space, a residence would need to be at least 400 feet from the nearest pile driver in order to experience a sound of 83 dB or less.

The BBC Report recommends the following mitigation measures to address any potential noise impacts.

1. Ashwood Solar should contact homes within 500 feet of any pile driving activity and notify them in advance of the upcoming activity, its timing and anticipated duration, rather than waiting for complaints from those residents. It should also provide the opportunity for residents to ask questions or provide feedback, if desired

2. Ashwood Solar should respond to any noise-related complaints from residents adjacent to the project boundary, and work with those residents to reduce noise-related concerns through careful scheduling or other means to the extent feasible.

The Siting Board further finds that the noise levels created during the construction phase could cause adverse impacts to the nearby property owners. The Siting Board finds that modification to reflect a construction time period—with no earlier start than 8 a.m. with a construction stop at 6 p.m. Monday through Saturday—shall be made. To further ensure as little noise impacts as reasonably possible during the construction period, the Siting Board will require any additional mitigation measures outlined in Appendix A to this Order.

Mitigation Measures Proposed by Ashwood Solar I

Ashwood Solar I's SAR contained the following mitigation measures that it plans to implement:

1. Planting of native evergreen species as a visual buffer to mitigate viewshed impacts. Plantings to primarily be in areas directly adjacent to the Project without existing vegetation; see Exhibit E for anticipated planting areas and the specifics of the plantings. Members of the development team have been meeting with neighbors to discuss specific viewshed concerns.

2. Cultivation of at least two acres of native pollinator-friendly species onsite; see Exhibit E for anticipated pollinator area.

3. Ashwood Solar had an Environmental Site Assessment (ESA) Phase 1 completed for the site. See Exhibit D for the results of this study. Please note, this Phase 1 ESA includes parcels (approximately 600 acres) not planned for development as part of the Ashwood Solar I project.

The Siting Board has reviewed the mitigation measures that have either been proposed by Ashwood Solar I or measures that have been accepted by Ashwood Solar I in response to discovery requests or recommended in the BBC Report and have modified certain of those measures. Additionally, Ashwood Solar I shall place panels, inverters and substation equipment no closer to noise receptors than indicated in Ashwood Solar I's noise and traffic study.

The Siting Board finds that the mitigation measures as proposed and as modified are appropriate and reasonable and will be listed in further detail in Appendix A to this order.

The Siting Board finds that Ashwood Solar I's SAR complies with all of the statutory requirements of KRS 278.708 subject to the mitigation measures and conditions imposed in this Order and the attached Appendix A.

II. Requirements under KRS 278.710(1)

In addition to the evaluation of the factors contained in the SAR, KRS 278.710(1) directs the Siting Board to consider the following additional criteria in rendering its decision:

- Economic impact on the affected region and state;
- Existence of other generation facilities;

- Local planning and zoning requirements;
- Potential impact on the electricity transmission system;
- Compliance with statutory setback requirements; and
- History of environmental compliance.

Economic Impact on Affected Region and the State

According to Ashwood Solar I's economic impact report, the proposed solar facility will generate lasting positive economic and fiscal impacts on the entire affected region. Such impacts includes the creation of hundreds of construction jobs, expansion of the local tax base, and the benefits of having a long-term employer and corporate citizen in the region that has a strong commitment to investing in the communities it serves. Ashwood Solar I states that a payments in lieu of taxes (PILOT) agreement is being negotiated, but had not been finalized. The estimated economic impacts in Ashwood Solar I's analysis does not include the PILOT or property tax revenue that will be generated and paid to Lyon county annually over the lie of the project.⁶⁵ In addition, Ashwood Solar I stated that it was unaware of any corporate income tax or license and occupational tax on businesses. However, the project will pay state-level corporate income, property and sales taxes to various jurisdictions.⁶⁶ The estimated capital cost of the facility is approximately \$100 million.⁶⁷

During construction, Ashwood Solar I estimates that approximately 264 full time jobs will be created with an additional 240 jobs being supported through supply chain

⁶⁵ Application Attachment J, Economic Report at 1.

⁶⁶ Ashwood Solar I's Response to Siting Board Staff's First Request for Information (filed Feb. 25, 2021), Item 8a and 8b.

⁶⁷ *Id.* Item 3 at 2.

impacts and induced employment impacts.⁶⁸ Ashwood Solar I didn't estimate how many jobs would be created locally, but stated that many positions could be filled utilizing local labor such as equipment operators, truck drivers, electricians, laborers, and some skilled positions will be required and drawn from Lyon County and the region.⁶⁹ Ashwood Solar I stated that the construction phase of the project is estimated to have a total economic impact to the community of more than \$57 million, with more than \$20 million coming from onsite labor and services.⁷⁰ During the project operations phase, the proposed solar facility will create approximately 3 full time equivalent jobs locally and an additional 2 full-time equivalent jobs statewide. The total economic output to the community and region from operation of the project is estimated to be more than \$575,999 annually over the life of the facility.⁷¹ BBC Research and Consulting did not evaluate the economic impact of the project.

Having reviewed the record, the Siting Board finds that the Ashwood Solar I facility will have a positive economic impact on the region. The Siting Board notes that the solar facility will be one of the very few utility-scale renewable generation resource in the state and will be one of the largest solar facilities in the state.

Existence of Other Generating Facilities

Ashwood Solar I states that it is rare for utility-scale solar projects to be co-located with existing electricity generating infrastructure, but as a result of its efforts, it is located

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ *Id.* Item 3 at 2 and Item 6.

on land with existing transmission lines.⁷² There are two transmission lines that intersect the southern project boundary; KU owns the North Princeton to South Paducah 161 kV transmission line and Big Rivers Electric Co-op owns the Caldwell County to Barkley 161 kV transmission line. At Ashwood Solar I's expense, the project will interconnect with the KU North Princeton line.⁷³

KRS 278.710(1)(d) provides that the Siting Board must consider whether a merchant plant is proposed for a site upon which facilities capable of generating 10 MW or more of electricity are currently located. Although the site upon which the Ashwood Solar I solar facility will be located does not contain any other generating facilities, the Siting Board notes the selected site will encompass an existing transmission line and Ashwood Solar I will be able to directly interconnect its solar facility to that of the existing transmission line without the need for any additional land. Also, as previously determined, the generally passive characteristics of the solar facility will be compatible with the surrounding area.

Local Planning and Zoning Requirements

Ashwood Solar I states that the proposed solar facility will be located entirely in Lyon County. Ashwood Solar I notes that Lyon County has not enacted any zoning ordinances or setback requirements for the location of the Ashwood Solar I solar facility.⁷⁴ Ashwood Solar I informs that there are no setback requirements established by a planning and zoning commission for the location of the project. Ashwood Solar I submitted as part

⁷² Application Volume 1, Section 7, Efforts to locate near Existing Electric Generation at 12.

⁷³ *Id.* See also Application, Volume 2, Section 2, Description of Proposed Site at 4.

⁷⁴ Application, Volume 1, Section 4, Compliance with Local Ordinances and Regulations at 6.

of its application a certification that the proposed project will be in compliance with all local ordinances and regulations concerning noise control and with any applicable local planning and zoning ordinances.⁷⁵

The Siting Board finds that Ashwood Solar I's certification that the proposed facility will meet all local planning and zoning requirements satisfies the requirements of KRS 278.710(1)(e).

Impact on Transmission System

Ashwood Solar I states the Project is within the LGE/KU territory, and therefore the interconnection of the project will be on LGE/KU transmission system. TranServe International is the Independent Transmission Organization (ITO) that manages requests for interconnection with LGE/KU's transmission system.⁷⁶ The interconnection study process for LGE/KU involves three study phases: Feasibility Study, System Impact Study, and Facilities Study.

The purpose of the feasibility study is to determine a plan, with ballpark cost and construction time estimates, to connect the proposed Ashwood Solar I solar facility to the LGE/KU network at a location specified by Ashwood Solar I. The purpose of the facilities study encompasses the engineering design work necessary to begin construction of required expansion plan upgrades identified by LGE/KU to accommodate an interconnection request. LGE/KU issued the Facilities Study Report on the Ashwood Solar I project in May 2018.⁷⁷ The Facilities Study shows that Ashwood Solar I will be

⁷⁵ Application, Exhibit C, Certificate of Compliance at 1.

⁷⁶ Application, Volume 1, Section 9, Effect on Kentucky Electricity Generation System at 14.

⁷⁷ Ashwood Solar I also appears to deem its Facilities Study as its Feasibility Study, as it references Attachment G for both studies.

responsible for network interconnection facilities costs of approximately \$3,078,000.⁷⁸ These interconnection facilities consist of a substation, telecom, and transmission lines.⁷⁹

The System Impact Study determines potential impacts to the regional electric grid and the need for any network upgrades to mitigate potential impacts. LGE/KU issued the System Impact Study Report for the Ashwood Solar I solar facility in January 2018. The System Impact Study Report indicated that Ashwood Solar I will be responsible for total interconnection costs of approximately \$11,940,000. These upgrades consist of interconnection facilities and network facilities.⁸⁰

KRS 278.710(f) provides that the Siting Board should consider whether the additional load imposed upon the electricity transmission system by use of the Ashwood Solar I solar facility will adversely affect the reliability of service for retail customers of electric utilities regulated by the Public Service Commission (PSC). Having reviewed the record, the Siting Board finds that the proposed solar facility will not adversely impact the reliability of service provided by retail electric utilities under the PSC's jurisdiction based upon Ashwood Solar I's commitment to the interconnection process and protocols and its acceptance of any cost obligations resulting from the interconnection process and protocols consistent with the requirements under KRS 278.212. The Siting Board finds that Ashwood Solar I has satisfied the requirements of KRS 278.710(f).

Compliance with Setback Requirements

⁷⁸ Application Volume 1, Attachment G, Feasibility Study Report at 7.

⁷⁹ Application Volume 1, Attachment F, System Impact Study Report at 5.

⁸⁰ *Id.*

Ashwood Solar I's application acknowledges that KRS 278.706(2)(e) requires all proposed structures or facilities used for generation of electricity to be at least 2,000 feet from any residential neighborhood, school, hospital, or nursing home facility subject to a certain exception that is not applicable in this instance. KRS 278.700(6) defines "residential neighborhood" as a populated area of five or more acres containing at least one residential structure per acre. Ashwood Solar I states that there is one residential neighborhood within 2,000 feet of the proposed "structures or facilities used for generation of electricity." Ashwood Solar I filed a motion, pursuant to KRS 278.704(4), seeking a deviation from the 2,000 foot setback requirement.⁸¹ Within the single nearby residential neighborhood there are twelve single family homes and mobile homes on Breezy Loop which is located near the intersection of US 641 and New Bethel Church Road. The nearest receptors are approximately 35 feet from the project boundary. According to the proposed site plan, with setbacks these nearby receptors actually range from approximately 120 feet to more than 600 feet away from the proposed solar panels. In addition, the New Bethel Church is 500 feet from the Southern edge of the project.

Ashwood Solar I is seeking a deviation from the 2,000-foot setback requirement in KRS 278.704(2) to allow it to place generating equipment 126 feet from the nearest residence in the Breezy Loop Neighborhood.⁸² Additionally, Ashwood Solar I seeks approval to place Project inverters within 395 feet of a residence within the Project area.⁸³

⁸¹ Applicant's Motion for Deviation from Setback Requirements (filed Mar. 10, 2021).

⁸² Ashwood Solar I's Response to Siting Board Staff's Second Request for Information (filed Mar. 25, 2021), Item 2.

⁸³ *Id.*

KRS 278.704(4) provides that the Siting Board may grant a deviation from the setback requirements if it is determined that the proposed facility as designed and as located would meet the goals of KRS 224.10-280 (Cumulative Environmental Assessment), KRS 278.010 (definitions), KRS 278.212 (costs of upgrading existing grid), KRS 278.214 (curtailment of service), KRS 278.216 (site assessment report), KRS 278.218 (transfer of ownership), and KRS 278.700 to KRS 278.716 (Siting Board requirements) at a distance closer than the required 2,000 feet.

Subject to certain exceptions not applicable in this matter, KRS 224.10-280 requires a person to submit a cumulative environmental assessment (CEA) to the Kentucky Energy and Environment Cabinet (Cabinet) along with a fee before beginning construction of an electric power plant. Although it is unaware of any regulations that have been promulgated regarding CEAs, including any regulations that would establish a fee for the processing of a CEA, Ashwood Solar I developed a CEA for submission to the Cabinet. Ashwood Solar I states that the CEA provides an in-depth analysis of the potential air pollutants, water pollutants, wastes, and water withdrawal associated with the proposed merchant solar facility. The CEA shows that the Ashwood Solar I solar facility will produce zero emissions and that limited air emissions will occur during construction through the operation of vehicles and equipment and will consist of emissions of particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, and volatile organic compounds generated through the combustion of gasoline and diesel fuels. Although there will be some indirect air emissions during construction and operations from the use of vehicles and mowing, respectively, no air quality permit is required for these construction or ancillary activities.

With respect to water evaluation, Ashwood Solar I will conduct Project construction activities in compliance with Kentucky Division of Water's (KDOW) Construction Storm Water Discharge General Permit for any construction activities that disturb one acre or more. Contractors will be required to use silt fences, temporary sediment basins and traps, buffers around streams and wetland, and other best management practices in order to minimize the impacts of stormwater runoff and will implement a stormwater pollution prevention plan to comply with KDOW requirements.⁸⁴ Ashwood Solar I states that with the use of best management practices that will be followed to minimize impacts associated with construction. The CEA concludes once construction is complete, Ashwood will have little to no impacts on surface water during operations and maintenance. Best management practices will be utilized during any activities that may cause runoff of any sediments or pollutants.⁸⁵

With respect to waste evaluation, the CEA notes that construction activities will generate solid waste consisting of construction debris and general trash, such as wood, cardboard, and plastic packaging. No special wastes as defined in KRS 224.50–760 are anticipated to be generated during construction or operations and maintenance. No existing structures would be demolished. Ashwood Solar I states that wastes developed during construction and operation will be recycled where practicable or otherwise disposed of in accordance with applicable regulations. The Project could also generate very small amounts of hazardous waste. The Project would be considered a conditionally

⁸⁴ Applicant's Motion for Deviation from Setback Requirements at 8.

⁸⁵ *Id.*, Exhibit 3, Cumulative Environmental Assessment at 3.

exempt small quantity generator. Any hazardous waste will be managed offsite at a permitted facility.⁸⁶

With respect to managing water withdrawal and usage, the Ashwood Solar I solar facility will primarily utilize groundwater from existing onsite wells to provide water or water will be hauled as needed for construction activities. Construction-related water use would support site preparation (including dust control, if applicable) and grading activities. Similar to other solar facilities, the Ashwood Solar I solar project is not water intensive during the operational phase.

Ashwood Solar I states that, based upon the CEA submitted to the Cabinet, the goals of the requirements of KRS 224.10-280 have been met.

With respect to KRS 278.010, Ashwood Solar I states that this statutory provision sets forth the definitions to be used in conjunction with KRS 278.010 to KRS 278.450, KRS 278.541 to KRS 278.544, KRS 278.546 to KRS 278.5462, and KRS 278.990. Ashwood Solar I asserts that the Siting Board's authority begins with KRS 278.700 and extends through KRS 278.716 and any applicable provision of KRS 278.990. Ashwood Solar I contends that in filing a complete application pursuant to the applicable statutes in this proceeding, the company has satisfied the goal of providing the required information utilizing the definition of any applicable term defined in KRS 278.010.

KRS 278.212 requires the filing of plans and specifications for electrical interconnection with merchant electric generating facility and imposes the obligation upon a merchant electric generating developer for any costs or expenses associated with upgrading the existing electricity transmission grid as a result of the additional load

⁸⁶ *Id.*

caused by a merchant electric generating facility. Ashwood Solar I avers that it has met the goals of KRS 278.212 because Ashwood Solar I will comply with all applicable conditions relating to electrical interconnection with utilities by following the LGE/KU interconnection process. Additionally, Ashwood Solar I states that it will accept responsibility for appropriate costs which may result from its interconnecting with the electricity transmission grid.

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. Ashwood Solar I states that it will abide by the requirements of this provision to the extent that these requirements are applicable.

KRS 278.216 requires utilities under the jurisdiction of the Kentucky PSC to obtain a site compatibility certificate before beginning construction of an electric generating facility capable of generating more than 10 megawatts. An application for a site compatibility certificate should include the submission of a site assessment report as prescribed in the applicable Siting Board statutes. Ashwood Solar I states that it is not a utility under the jurisdiction of the Kentucky PSC. However, Ashwood Solar I states that it has nonetheless met the requirements of KRS 278.216 by complying with the requirements of KRS 278.700 *et seq.*, including the submission of a site assessment report.

KRS 278.218 provides that no transfer of utility assets having an original book value of \$1 million or more without prior approval of the Kentucky PSC if the assets are to be transferred by reasons other than obsolescence or the assets will continue to be used to provide the same or similar service to the utility or its customers. Ashwood Solar

I states that it is not a utility as that term is defined in KRS 278.010(3). However, to the extent Siting Board approval may at some time be required for change of ownership or control of assets owned by Ashwood Solar I, Ashwood Solar I states that it will abide by the applicable rules and regulations which govern its operation.

KRS 278.700 *et seq.* governs the Siting Board's jurisdiction and process. Ashwood Solar I states that it has met the goals set forth in these provisions as evidenced by the application in its entirety. Ashwood Solar I further states that it has provided a comprehensive application with a detailed discussion of all of the criteria applicable to its proposed facility under KRS 278.700–278.716.

Having reviewed the record and being otherwise sufficiently advised, the Siting Board finds that Ashwood Solar I has demonstrated the proposed facility as designed and as located would meet the goals of the various statutes set forth in KRS 278.704(4) at a distance closer than the required 2,000 feet and is therefore permitted to a deviation from the 2,000 foot setback requirement as noted below. The Siting Board notes that the mitigation requirements imposed in the Compatibility with Scenic Surroundings and Noise and Anticipated Noise Level sections will also provide some level of protection for persons occupying a property adjacent to the proposed solar facility with respect to noise, visual obstruction of scenic views, and traffic. Based on the record in this matter, including the results of the noise and traffic study, Ashwood Solar I shall not place solar panels closer than 150 feet from a residence, and shall not place a central inverter closer than 450 feet from a residence. If used, string inverters may be placed no closer than 150 feet from a residence.

History of Environmental Compliance

Ashwood Solar I states that neither it nor any entity with ownership interest in the proposed solar project has violated any state or federal environmental laws or regulations. Ashwood Solar I further states that there are no pending actions against it nor any entity with ownership interest in the proposed solar project.

KRS 278.710(1)(i) directs the Siting Board to consider whether the applicant has a good environmental compliance history. In light of Ashwood Solar I's verified statement and no evidence to the contrary, the Siting Board finds that Ashwood Solar I has satisfied the requirements of KRS 278.710(1)(i).

Decommissioning

According to Ashwood Solar I, the proposed solar facility could potentially have an expected useful life of 40 years.⁸⁷ Ashwood Solar I has not prepared a formal decommissioning plan, but notes that it is obligated to restore the leased lands to ensure decommissioning under the provisions included in individual lease agreements with participating landowners.⁸⁸ As applicable to individual lease agreements, Ashwood Solar I generally provides the following terms of decommissioning:

Within (12) twelve months of after any surrender, termination, or expiration of this Agreement, Tenant shall decommission the Project Facilities, which shall include the restoration of the surface of the Property to a condition and contour reasonably similar to that existing on the Property as of the Effective Date and removal of all above-grade and below-grade Project Facilities located on the Property to not less than (3) three feet below grade and the burial of all foundations below grade with topsoil and reseed areas where the foundations were located with grasses and/or natural vegetation (the "Restoration Requirements). Tenant has no obligation to remove any

⁸⁷ Hearing Video Transcript at the May 11, 2021 Hearing at 9:19:19 (Statement that leases may be for 40 years).

⁸⁸ *Id.* at 9:40:00.

cables, lines, or conduit that is buried three feet or more below grade. Any access roads constructed by Tenant will remain on the Property unless Owner specifically requests their removal in writing within (30) thirty days after the surrender, termination, or expiration of this Agreement. Tenant has no obligation to restore any borrow pits or quarries. Owner shall grant to Tenant or any Affiliate, or any other entity designated by Tenant or any Affiliate that is involved or intends to be involved in meeting the Restoration Requirements, recordable and assignable non-exclusive easements on, under, over, and across the Property, for access to and from, and ingress and egress from, the Solar Energy Projects and Project Facilities, whether the Solar Energy Projects and Project Facilities are located on the Property or on other lands. Among other things, such access easements shall contain all of the rights and privileges for access, ingress, egress, and roads as are set forth in this Agreement.

Ashwood Solar I has also stated it will be filing a bond pursuant to the general requirements under its leases, to include the industry standard calculation, which will be reviewed and re-assess every five years by a licensed Engineer.⁸⁹

The BBC Report does not comment on decommissioning of Ashwood Solar I's solar facility.

The Siting Board finds that decommissioning is an important consideration to ensure the land used during the life of the proposed solar facility can be returned to its original use as well as ensuring that such an obligation can be properly enforced. The Siting Board will accordingly require the additional and modified mitigation measures:

1. Ashwood Solar I shall develop an explicit decommissioning plan. This plan shall commit Ashwood Solar I to removing all facility components, above-ground and below-ground, regardless of depth, from the project site and Lyon County at the cessation of operations. Upon its completion, this plan shall be filed with the Siting Board or its

⁸⁹ *Id.*

successors. The decommissioning plan shall be created at least one month prior to construction of the Project.

2. Ashwood Solar I shall be required to file a bond, equal to the amount necessary to effectuate the explicit decommissioning plan naming Lyon County as a third-party beneficiary, in addition to the lessors of the subject property insofar as the leases contain a decommissioning bonding requirement, so that Lyon County will have the authority to draw upon the bond to effectuate the decommissioning plan. The bond shall be in place at the time of commencement of operation of the Project. The bond amount shall be reviewed every five years at Ashwood Solar I's expense to determine and update the cost of removal amount. This review shall be conducted by an individual or firm with experience or expertise in the costs of removal or decommissioning of electric generating facilities. Certification of this review shall be provided to the Siting Board or its successors and the Lyon County Fiscal Court. Such certification shall be by letter and shall include the current amount of the anticipated bond and any change in the costs of removal or decommissioning.

The Siting Board will require Ashwood Solar I to implement the decommissioning measures recommended set forth above as ongoing conditions of its grant of a certificate in this matter.

CONCLUSION

After carefully considering the criteria outlined in KRS Chapter 278, the Siting Board finds that Ashwood Solar I has presented sufficient evidence to support the issuance of a deviation from the setback requirements of KRS 278.704(2) and a Certificate to Construct the proposed merchant solar facility. The Siting Board conditions

its approval upon the full implementation of all mitigation measures 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.

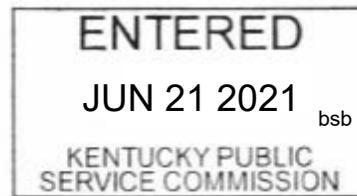
IT IS THEREFORE ORDERED that:

1. Ashwood Solar I's application for a Certificate to Construct an approximately 86 MWac merchant solar electric generating facility in Lyon County, Kentucky, is conditionally granted subject to full compliance with the mitigation measures and condition prescribed in Appendix A.

2. Ashwood Solar I's motion for deviation from the 2,000 foot setback requirement is granted.

3. Ashwood Solar I shall fully comply with the mitigation measures and conditions prescribed in Appendix A.

By the Kentucky State Board on Electric
Generation and Transmission Siting



ATTEST:

A handwritten signature in blue ink that reads "Linda C. Bidwell". The signature is written in a cursive style and is positioned above a horizontal line.

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

Case No. 2020-00280

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING IN CASE NO. 2020-00280 DATED JUN 21 2021

MITIGATION MEASURES AND CONDITIONS IMPOSED

The following mitigation measures and conditions are hereby imposed on Ashwood Solar I, LLC (Ashwood Solar I or Applicant) 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 layouts provided in this matter 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 or other Project facilities and infrastructure.

2. Any change in Project boundaries from the information which formed this evaluation should be submitted to the Siting Board for review.

3. The Board will determine if any deviation in the boundaries or site layout plan is likely to create a materially different pattern or magnitude of impacts. If not, no further action is required, but if yes, the application will support the Siting Board's effort to revise its assessment of impact and mitigation requirements.

4. A final, Project specific, construction schedule, including revised estimates of on-site workers and commuter vehicle traffic, shall be submitted to the Siting Board. Deviations from the preliminary construction schedule provided in this matter should be clearly indicated.

5. The Board will determine if any deviation to the construction schedule or workforce estimates is likely to create a materially different pattern or magnitude of impacts. If not, no further action is required, but if yes, the Applicant will support the Siting Board's effort to revise its assessment of impacts and mitigation requirements.

6. The Applicant 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.

7. The Applicant's access control strategy shall also include appropriate signage to warn potential trespassers. The Applicant must ensure that all site entrances and boundaries have adequate signage, particularly in locations visible to the public, local residents, and business owners.

8. According to National Electric Code regulations, the security fence must be installed prior to any electrical installation work. The substation will have its own separate security fence and locked access installed.

9. Existing vegetation between the solar arrays and the residences will be left in place, to the extent practicable, to help screen the Project, and reduce visual impacts from nearby homes and roadways.

10. Ashwood Solar I shall follow through on its commitment to providing vegetative buffers. If vegetation is used, plants should reach eight feet high within four years. The vegetation should be maintained or replaced as needed. To the extent an affected property owner indicates to Ashwood Solar I that such a buffer is not necessary, Ashwood Solar I will need to obtain that property owner's written consent and submit such consent in writing to the Solar Board.

11. Ashwood Solar I shall cultivate at least two acres of native pollinator-friendly species onsite.

12. Ashwood Solar I will not remove any existing vegetation unless the existing vegetation needs to be removed, except to the extent it must remove such vegetation for the construction and operation of Project components.

13. Ashwood Solar I must commit to rectify any damage to public roads. "Rectify" shall mean fix or fully compensate the appropriate transportation authorities for any damage or degradation to the existing road network that it causes or to which it materially contributes to.

14. The Applicant will comply with all laws and regulations regarding the use of roadways.

15. The Applicant will consult with the Kentucky Transportation Cabinet (KYTC) regarding truck and other construction traffic and obtain necessary permits from the KYTC.

16. The Applicant will consult with Lyon County Road Department (LCRD) regarding truck and other construction traffic and obtain necessary permits from the LCRD.

17. The Applicant will comply with any road use agreement executed with LCRD. Such an agreement might consider special considerations for overweight loads, routes utilized by heavy trucks, road weight limits, and bridge weight limits.

18. The Applicant will properly maintain construction equipment and follow best managed practices related to fugitive dust throughout the construction process. This should keep dust impacts to a minimal level.

19. Ashwood Solar I shall develop a traffic management plan to minimize the impacts of any traffic increase and keep traffic safe. Any such traffic management plan shall also identify any noise concerns during the construction phase and develop measures that would address those noise concerns.

20. Ashwood Solar I will be required to limit the construction activity, process, and deliveries to the hours of 8 a.m. and 6 p.m. Monday through Saturday. These hours represent a reasonable timeframe to ensure that nearby property owners are minimally impacted by the construction activities.

21. Ashwood Solar I shall develop special plans and obtain necessary permits before bringing heavy loads, especially the substation transformer, onto state or county roads in the vicinity.

22. Ashwood Solar I shall notify residents and businesses within 2,400 feet of the project boundary about the construction plan, the noise potential, and the mitigation plans at least one month prior to construction start.

23. Ashwood Solar I shall remain in contact with nearby residents to confirm that noise levels are not unduly high or annoying after the pounding and placement of the solar panel racking begins. If the noise levels are unduly high or annoying, the Applicant shall mitigate those effects as needed.

24. If the pile driving activity occurs within 1,500 feet of a noise sensitive receptor, Ashwood Solar I 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).⁹⁰

25. Ashwood Solar I shall implement a Customer Resolution Program to address any complaints from surrounding landowners. Ashwood Solar I shall also submit annually a status report associated with its Customer Resolution Program, providing, among other things, the individual complaints, how Ashwood Solar I addressed those complaints, and the ultimate resolution of those complaints identifying whether or not the resolution was to the complainant's satisfaction.

26. Ashwood Solar I shall place panels, inverters and substation equipment no closer to noise receptors (homes) than indicated in Ashwood Solar I's noise and traffic study, but additional mitigation measures are required for anticipated noise levels of certain facilities. Specifically, based on the noise information provided by the Applicant, the Siting Board has three mitigation measures beyond that recommended in the noise and traffic study: (1) the Central Inverter shall be no closer to a noise receptor than 450 feet, (2) the String Inverter shall be no closer to a noise receptor than 150 feet, and (3) Solar Panels shall be no closer to a noise receptor than 150 feet.

27. Ashwood Solar I shall implement planting of native evergreen species as a visual buffer to mitigate viewshed impacts. Plantings to primarily be in areas directly adjacent to the Project without existing vegetation.

28. Ashwood Solar I shall plant a vegetative buffer "where there are potential visual impacts created by the facility..." This buffer shall consist of two staggered rows

⁹⁰ Ashwood Solar I's Response to Siting Board Staff's Post-Hearing Request for Information (filed May 25, 2021), Item 2.

of evergreen shrubs at least three feet high at the time of planting, approximately 15 feet wide.

29. Ashwood Solar I shall complete screening plan agreements with nearby homeowners as stated in Section 2 of the SAR to address their general concerns about viewshed impacts by limited tree clearing and planting vegetative buffers to further buffer viewshed concerns. Vegetative buffering shall be maintained or replaced as needed. To the extent an affected property owner indicates to Ashwood Solar I that such a buffer is not necessary, Ashwood Solar I will need to obtain that property owner's written consent and submit such consent in writing to the Siting Board.

30. Ashwood Solar I shall carry out the screening plan and make sure the proposed new vegetative buffers are successfully established and develop as expected over time.

31. Ashwood Solar I shall implement ridesharing between construction workers, use appropriate traffic controls or allow flexible working hours outside of peak hours to minimize any potential delays during AM and PM peak hours.

32. Ashwood Solar I shall continue discussions with Texas Gas Transmission to finalize encroachment and crossing agreements as soon as possible so the exact location and characteristics of internal roadways can be designed to meet weight and frequency limits and other applicable crossing requirements.

33. Ashwood Solar I shall ensure that all site entrances and boundaries have adequate signage, particularly in locations visible to the general public, local residents, and business owners.

34. Ashwood Solar I shall contact the KYTC as soon as possible to discuss the transportation requirements and possible restrictions for transportation of the substation transformer on US 641. If the route requires on-site assessment by KYTC before approval and permitting, Ashwood Solar I shall allow as much time as possible for that process to occur.

35. As applicable to individual lease agreements, Ashwood Solar I, its successors, or assigns will abide by the specific land restoration commitments agreed to by individual property owners, as described in each signed lease agreement.

36. Ashwood Solar I shall develop an explicit decommissioning plan. This plan shall commit Ashwood Solar I to removing all facility components, above-ground and below-ground, regardless of depth, from the project site and Lyon County at the cessation of operations. Upon its completion, this plan shall be filed with the Siting Board or its successors. The decommissioning plan shall be created at least one month prior to construction of the Project.

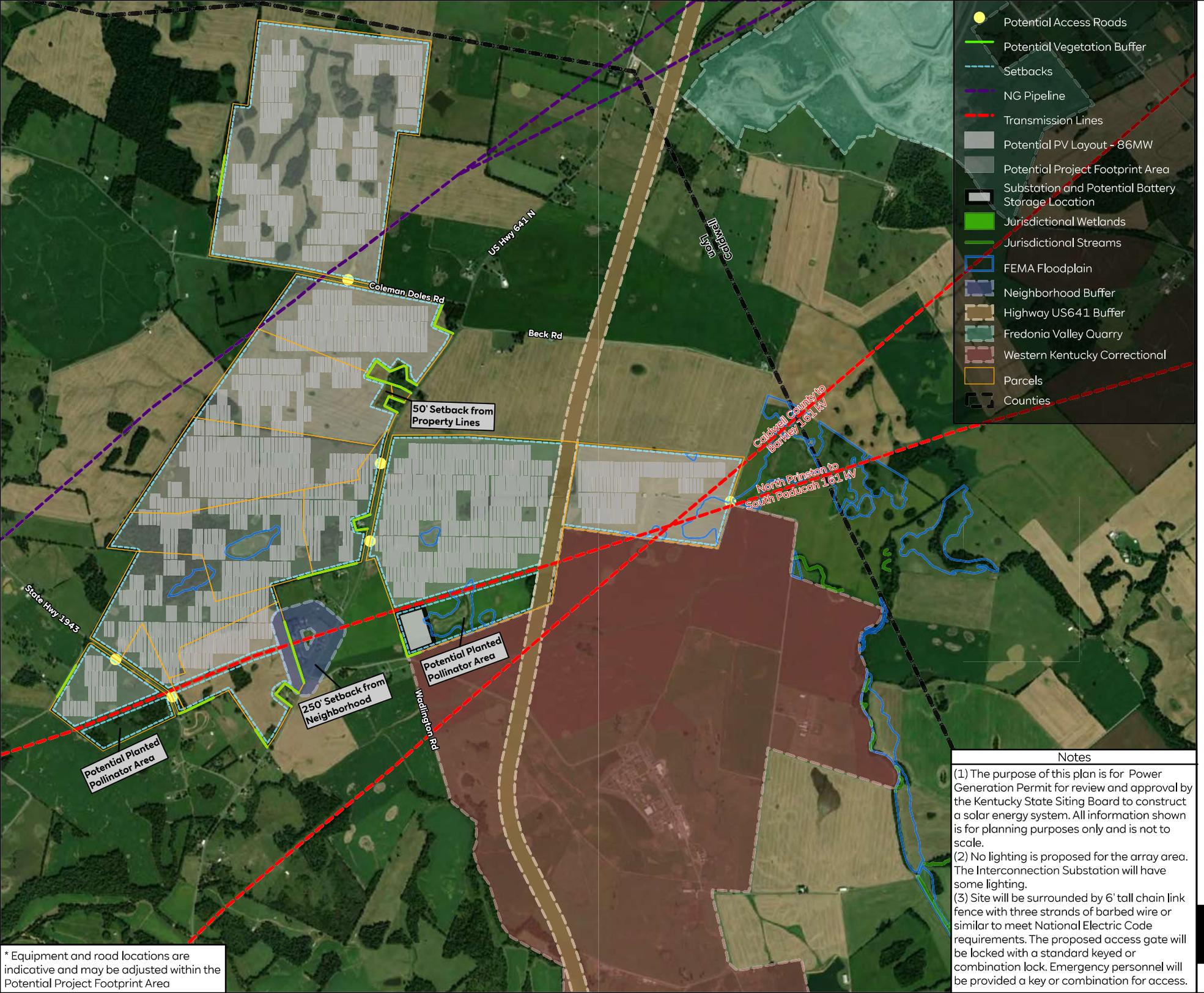
37. Ashwood Solar I shall be required to file a bond, equal to the amount necessary to effectuate the explicit decommissioning plan naming Lyon County as a third-party beneficiary, in addition to the lessors of the subject property insofar as the leases contain a decommissioning bonding requirement, so that Lyon County will have the authority to draw upon the bond to effectuate the decommissioning plan. The bond shall be in place at the time of commencement of operation of the Project. The bond amount shall be reviewed every five years at Ashwood Solar I's expense to determine and update the cost of removal amount. This review shall be conducted by an individual or firm with experience or expertise in the costs of removal or decommissioning of electric generating

facilities. Certification of this review shall be provided to the Siting Board or its successors and the Lyon County Fiscal Court. Such certification shall be by letter and shall include the current amount of the anticipated bond and any change in the costs of removal or decommissioning.

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY STATE BOARD
ON ELECTRIC GENERATION AND TRANSMISSION SITING IN
CASE NO. 2020-00280 DATED JUN 21 2021

ONE PAGE TO FOLLOW



- Potential Access Roads
- Potential Vegetation Buffer
- - - Setbacks
- NG Pipeline
- - - Transmission Lines
- Potential PV Layout - 86MW
- Potential Project Footprint Area
- Substation and Potential Battery Storage Location
- Jurisdictional Wetlands
- Jurisdictional Streams
- FEMA Floodplain
- Neighborhood Buffer
- Highway US641 Buffer
- Fredonia Valley Quarry
- Western Kentucky Correctional
- Parcels
- Counties

50' Setback from Property Lines

250' Setback from Neighborhood

Potential Planted Pollinator Area

Potential Planted Pollinator Area

Notes

(1) The purpose of this plan is for Power Generation Permit for review and approval by the Kentucky State Siting Board to construct a solar energy system. All information shown is for planning purposes only and is not to scale.

(2) No lighting is proposed for the array area. The Interconnection Substation will have some lighting.

(3) Site will be surrounded by 6' tall chain link fence with three strands of barbed wire or similar to meet National Electric Code requirements. The proposed access gate will be locked with a standard keyed or combination lock. Emergency personnel will be provided a key or combination for access.

* Equipment and road locations are indicative and may be adjusted within the Potential Project Footprint Area

Projection
NAD 1983 2011 StatePlane
Kentucky South FIPS 1602 Ft US

Date
08.24.2020

Project
Ashwood
86 MW

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