

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

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

RESPONSE TO CONSULTANT’S REPORT

Ashwood Solar I, LLC (“Ashwood Solar”), by counsel, hereby provides its Response to the report prepared by BBC Research & Consulting (“BBC”). In this Response, Ashwood Solar will generally describe the background, comment on BBC’s review of the components of the Site Assessment Report, and discuss BBC’s proposed mitigation measures. Ultimately, BBC recommends that the Siting Board approve the certificate of construction.¹

I. BACKGROUND

Ashwood Solar proposes to construct an 86-megawatt alternating current photovoltaic (PV) electricity generation facility, situated on land in Lyon County. Ashwood Solar filed an application for a certificate to construct this solar-energy project with the Siting Board on December 22, 2020. Prior to that filing, Ashwood Solar had a long history of local engagement and planning. As early as Fall 2016, it began its initial engagement with Lyon County landowners. By Spring 2018, Ashwood Solar began meeting with neighboring landowners. Later in the Summer 2018, Ashwood Solar was selected by Kentucky Municipal Energy Agency (“KYMEA”) for a Power Purchase Agree (“PPA”). It continued communications with landowners and

¹ BBC Report at B-8.

neighbors during this period. It also began making contacts with local officials as early as Fall 2019.

Pursuant to the notice requirements of KRS 278.706 and the Siting Board's Order dated August 26, 2020, Ashwood Solar also held a public meeting on August 27, 2020, at the Lyon County Old Courthouse Courtroom in Eddyville and online to inform the public about the Project and receive comments from them. Attendees were shown and invited to inspect an enlarged layout map of the project. That layout map was also displayed at the Courthouse in advance of the meeting.

Consistent with KRS 278.708(5), the Siting Board retained BBC to review the site assessment report ("SAR") filed by Ashwood Solar and provide recommendations concerning the adequacy of the SAR and proposed mitigation measures. Pursuant to subsection (2)(a) of that statute, the SAR is required to have a description of the proposed facility, including surrounding land uses, legal boundaries, proposed access controls, location of structures on the property, location of roadways, location of utility infrastructure, setbacks, and anticipated noise. The SAR must also include evaluation of four aspects of the project:

1. the compatibility of the facility with scenic surroundings,
2. potential changes in property values and land use resulting from the proposed facility for property owners adjacent to the facility,
3. anticipated peak and average noise levels associated with the facility's construction and operation, and
4. impact of the facility's operation on road and rail traffic to and within the facility, including anticipated levels of fugitive dust and any anticipated degradation of roads and lands.

KRS 278.708(2)(b)-(e).

II. DISCUSSION

A. Description of the proposed facility

1. Surrounding land uses

As indicated in the Site Assessment Report, the proposed project site covers an area of approximately 1,500 acres.² Nearly three quarters of the surrounding acreage is used for agriculture and the Western Kentucky Correctional Complex.³ The 21 adjoining residential parcels range in distance from 126 feet to 2,070 feet from the nearest solar panel.⁴

2. The legal boundaries of the proposed site;

Ashwood Solar's site consists of 10 parcels in Lyon County, totaling approximately 1,506.8 acres. BBC determined that the legal descriptions of the parcels that comprise the proposed site, found in Attachment B of the SAR, meet the Kentucky statutory requirements.⁵

3. Proposed access control to the site;

BBC explained that the level of potential risk to surrounding areas associated with a commercial solar facility is lower than for a fossil fuel (or renewable fuel) facility.⁶ It noted that Ashwood Solar plans to adhere to the National Safety Electric Code and that "the proposed access control measures are consistent with siting applications for other solar developments BBC has evaluated in Kentucky."⁷

4. The location of facility buildings, transmission lines, and other structures;

As noted by BBC, the aerial map of the site, presented in Exhibit E of the SAR, shows the projected location of the solar arrays, the existing transmission lines, access points, vegetative

² *Id.* at C-3.

³ *Id.* at B-1.

⁴ *Id.*

⁵ *Id.* at C-10.

⁶ *Id.*

⁷ *Id.* at 10-11.

buffers, pollinator planter areas, electrical sub-station sites, and potential battery storage sites that would be constructed as part of the project.⁸ The project will connect to a presently existing transmission line owned by Kentucky Utilities. The construction of a new/permanent building will not be required for ongoing maintenance and operations.⁹

5. Location and use of access ways, internal roads, and railways;

As shown in Exhibit E of the SAR, Ashwood Solar anticipates approximately six proposed access points to the facility. Internal roads would be developed from each access point, but definitive locations for the access points and proposed location of the internal roads is not yet known at this time.¹⁰ In addition, Ashwood Solar will consider the location of the natural gas transmission lines when designing specific road locations, and will ensure that the project will be engineered and designed in a manner that meets all vehicular weight, frequency limits, or other applicable crossing requirements of the pipeline company and the U.S. Department of Transportation.¹¹ There is no railway on site.¹²

6. Existing or proposed utilities to service the facility;

Local utility services may be required during operations to provide auxiliary and backup power to the project substation and operational storage shed, if applicable. It is too early in development to determine the engineering approach to substation design. As currently planned, the substation would be located in the Kentucky Utilities' service territory.

7. Compliance with applicable setback requirements as provided under KRS 278.704(2), (3), (4), or (5);

KRS 278.704 provides primacy for local setback requirements, but where there is no local

⁸ *Id.* at C-6.

⁹ *Id.* at C-11.

¹⁰ *Id.* at C-6, C-11.

¹¹ *Id.* at C-11, C-12.

¹² *Id.* at C-6

setback requirement, there is a 2,000-foot setback requirement from any residential neighborhood, school, hospital, or nursing home facility. In this case, Ashwood Solar has requested a deviation for the one neighborhood that is within that distance from the proposed facility. The Breezy Loop neighborhood is approximately 338 feet from the nearest proposed solar panel.

BBC indicated that a deviation from the setback requirement would be required in order to meet statutory guidelines. It did not render a specific opinion on whether the Siting Board should grant the deviation. But BBC did recommend approval of the certificate of construction, which would infer that BBC supports granting Ashwood Solar's motion for deviation from the setback requirements.

8. Noise levels expected to be produced by the facility

BBC evaluated the project for noise levels produced both during operation and construction. In order to provide context, BBC referred to guidelines from the Centers for Disease Control and Prevention ("CDC"), stating:

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 and noises over 120 dB can cause immediate harm to ears.

During operation, BBC indicated that the maximum noise level of the facility's panel tracking motors (78 dB at 10 meters) would be between 53 dB and 56 dB at the nearest residence.¹³ It anticipated that the noise level from the inverters would be approximately 35 dB at the closest residence. Based on this data, BBC determined that operational noise "would not be a significant concern," stating:

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. Given the

¹³ *Id.* at C-37

moderate decibel ratings of the facility's motors and inverters, the distance between the proposed facility's noise-emitting equipment and the nearest residences, and the installation of vegetative buffers that will mitigate both the visual and audible impacts of the facility, BBC concludes that noise levels at the proposed facility during normal operations will not be a significant concern.¹⁴

BBC acknowledged that there would be louder noises during construction, which would derive from pile drivers installing the racking system.¹⁵ Accordingly, BBC recommended two mitigation measures: (1) proactively contacting homes within 500 feet of any pile-driving activities and provide an opportunity for those residents to provide feedback and (2) responding to noise-related complaints and working with residents to the extent possible. Ashwood Solar agrees with these mitigating conditions.

B. Compatibility of the Facility with Scenic Surroundings

Regarding the scenic surroundings of the project, BBC stated:

Topography of the landscape directly impacts the visibility of the facility and Exhibit A states that the topography around the site is gently sloping. The site is located on relatively flat ground adjoining the nearest neighborhood (Breezy Loop) and other adjoining residences. As a result, there is little visual buffering from the surrounding topography to limit, or possibly eliminate, the view of solar panels from the homes in that neighborhood or other nearby residences.¹⁶

To help the Siting Board understand the topography and surroundings, BBC provided a number of images in Figures C-7 to C-16 of its report.

Ultimately, BBC supported Ashwood Solar's project as it relates to compatibility with the scenic surroundings, stating:

In general, BBC concurs with Ashwood Solar's statements that the

¹⁴ *Id.* at C-37.

¹⁵ *Id.*

¹⁶ *Id.* at C-15.

proposed facility would not be incompatible with its surroundings from a scenic standpoint. This assessment recognizes that solar facilities have a relatively low profile – similar to or lower than most single-family homes – and Ashwood Solar has agreed to install vegetative buffers to help screen the site from nearby homeowners as shown in Figures C-7 to C-16 and Exhibit E of the SAR.¹⁷

C. Potential Changes in Property Values

BBC conducted a thorough review of information related to the potential changes in property values. It commented on the differences between fossil fuel-fired generating plants and solar facilities.¹⁸ It reviewed findings from empirical studies.¹⁹ BBC considered the potential for more distant off-site effects. It reviewed the materials submitted by Ashwood Solar. And it conducted independent investigation on this issue.

Ultimately, BBC concluded *“that the proposed facility is unlikely to have measurable impacts on the property values of adjacent properties or other properties in the vicinity of the project.”*²⁰

D. Anticipated Peak and Average Noise Levels

Section II(A)(8) above provides information on BBC’s operational and construction noise levels. BBC specifically found that operational noise from the project’s equipment such as tracking motors and inverters “will not be a significant concern.”²¹ As for noise associated with construction of the project, BBC offered two mitigation measures that Ashwood Solar supports.

E. Traffic and Fugitive Dust

BBC considered the anticipated traffic volume resulting from construction as well as roadway weight limits.²² Regarding increased traffic volume, BBC estimated that traffic during

¹⁷ *Id.* at C-29.

¹⁸ *Id.* at C-30, C-31.

¹⁹ *Id.* at C-31.

²⁰ *Id.* at C-34 (emphasis added).

²¹ *Id.* at C-37.

²² *Id.* at C-40, C-41.

construction would increase approximately 6.4% on the largest artery (US Hwy 641) adjacent to the site.²³ As for weight limits, BBC noted that HS Hwy 641 was rated for 40 tons and any loads in excess of that amount could cause degradation to the road.²⁴ It also mentioned that the Lyon County State Highway Superintendent agrees to work with Ashwood Solar to plan large deliveries to the site, which is similar to its actions with another project that was routed without difficulty.²⁵

BBC recommended mitigation measures encouraging ridesharing to the construction site, compliance with all Transportation Cabinet requirements, and coordination with the Cabinet on routing and restrictions for traffic. Ashwood Solar agrees to these measures.

III. PROPOSED MITIGATION MEASURES

In addition to the mitigation measures proposed by Ashwood Solar, BBC proposed the following mitigation measures (some of which are discussed above), to which Ashwood Solar generally agrees.

Access points and internal roadways

- The application 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.

Visual compatibility

- Ashwood Solar 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 limiting tree clearing and planting vegetative buffers to mitigate viewshed concerns.

Transportation

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

²³ *Id.* at C-40.

²⁴ *Id.*

²⁵ *Id.*

- Ashwood Solar 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 should allow as much time as possible for that process to occur.

Noise

- 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.
- 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.

IV. CONCLUSION

Ashwood Solar appreciates the detailed review that BBC has performed with respect to this project. It is pleased that BBC has recommended approval for the project to the Siting Board. In light of BBC's report and recommendation, Ashwood Solar encourages the Siting Board to issue the certificate of construction for this project.

Respectfully submitted,
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