

COMMONWEALTH OF KENTUCKY

BEFORE THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION
AND TRANSMISSION SITING

In the Matter of:

ELECTRONIC APPLICATION OF FLAT RUN)	
SOLAR, LLC FOR A CERTIFICATE OF)	
CONSTRUCTION FOR AN APPROXIMATELY)	CASE NO.
55 MEGAWATT MERCHANT ELECTRIC)	2020-00272
SOLAR GENERATING FACILITY IN TAYLOR)	
COUNTY, KENTUCKY, PURSUANT TO KRS)	
278.700 AND 807 KAR 5:110)	

ORDER

On April 2, 2021, Flat Run Solar, LLC (Flat Run Solar or Project) filed an application requesting a Certificate of Construction to construct an approximately 55-megawatt alternating current (MWac) solar photovoltaic electric generating facility to be located at 5347 Saloma Road, Campbellsville, Taylor County, Kentucky.¹ Flat Run Solar is a limited liability company organized under the laws of North Carolina with a principal place of business in Durham, North Carolina.² Flat Run Solar filed notice of transfer of the membership interests in Flat Run Solar, LLC from Carolina Solar Energy, LLC to Engie Solar NA LLC (Engie Solar), a limited liability company organized under the laws of Delaware, effective as of May 28, 2021.³ Flat Run Solar remains the applicant for the Certificate of Construction herein.⁴

¹ Application Pleading at 1.

² *Id.*

³ Flat Run Solar's Notice of Transfer (filed Sept. 17, 2021).

⁴ *Id.*

The total acreage within the project boundary is 450 acres that has been predominantly used as pasture and crop land.⁵ The on-site equipment will consist of crystalline solar panels, racking, inverters, transformers, a DC-coupled energy storage system, one substation transformer, and an associated wiring and balance of system.⁶ The facility's output is expected to be transmitted and sold in the wholesale power market through the existing transmission line that crosses the property owned by East Kentucky Power Cooperative (EKPC).⁷

Pursuant to an Order issued on April 28, 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 Flat Run Solar's application, a deadline for the filing of the consultant's report, and an opportunity for Flat Run Solar to submit comments in response to the consultant's report. The April 28, 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

⁵ Application, Volume 1, Section 2, Description of Proposed Site at 4. At the hearing, the Applicant noted it has not yet secured a contract to sell power, or approval from the regional wholesale grid operator, PJM, to connect to the regional wholesale grid, though an application is pending.

⁶ *Id.*

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

by at least three interested persons that reside in Taylor 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 were no requests for intervention in this matter, no requests for an evidentiary hearing, and no requests for a public meeting or a local public hearing in this matter.

Flat Run Solar filed responses to multiple rounds of discovery in this matter. On April 30, 2021, Flat Run Solar 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 Flat Run Solar's site assessment report (SAR) and to provide recommendations concerning the adequacy of the SAR and proposed mitigation measures. A site visit was held on July 1, 2021. The BBC Report was filed on July 12, 2021. Flat Run Solar submitted its response to the BBC Report on July 24, 2021. A formal evidentiary hearing was held on September 8, 2021. Flat Run Solar filed responses to post-hearing data requests on September 17, 2021. Flat Run Solar did not file a post-hearing brief. 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 September 8, 2021 formal evidentiary hearing. The matter now stands submitted for a decision.

PROPOSED FLAT RUN SOLAR FACILITY

The proposed solar facility will be located at 5347 Saloma Road, Campbellsville, Taylor County, Kentucky.⁸ The proposed site totals approximately 450 acres.⁹ Flat Run Solar has entered into lease agreements with six adjoining and Project landowners as well as purchase agreements with two landowners to establish site control.¹⁰ Flat Run Solar 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.¹¹ 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 55 MWac and will be connected to an onsite existing transmission line owned by EKPC.¹² It is not expected that the Project will need to receive external utility services during operation, but, to the extent needed, electric service during construction may be provided by Taylor County RECC.¹³

Flat Run Solar notes that the area surrounding and within the project site consists of residential, agricultural, and industrial use.¹⁴

⁸ Application Pleading at 1.

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

¹⁰ Flat Run Solar's Response to Siting Board Staff's First Request for Information (filed Feb. 25, 2011), Item 14 (filed confidentially).

¹¹ Application Volume 1, Section 2, Description of Proposed Site at 4.

¹² Id., Section 7, Efforts to Locate Near Existing Electric Generation at 12.

¹³ Application Volume 2, SAR, Section 1, Description of Proposed Facility at 6.

¹⁴ Application Volume 2, Section 1, Description of Proposed Facility at 3.

Pursuant to KRS 278.706(2)(c), Flat Run Solar notified landowners whose property borders the proposed solar facility site via certified mail on March 12, 2021.¹⁵ Flat Run Solar also published notice of the proposed solar facility in the *Central Kentucky News-Journal*, the newspaper of general circulation in Taylor County, on March 11, 2020.¹⁶

In addition, Flat Run Solar also engaged in public involvement program activities, as required by KRS 278.706(2)(f), prior to the filing of its application. Flat Run Solar informs that it has been active in the Project area since September 2019.¹⁷ During that time, Flat Run Solar notes that it has met with landowners, stakeholders, and local government officials about the proposed 55-MW solar power project.¹⁸ Flat Run Solar also states that it held a public meeting on September 17, 2020, at the Lake Cumberland Area Development District Kentucky Career Center-Campbellsville to inform the public about the solar project and receive comments from the public.¹⁹ Flat Run Solar published notice of the public meeting in the September 3, 2020 edition of the *Central Kentucky News-Journal*.²⁰ Letters were also mailed to all adjoining landowners notifying them of the public meeting.²¹ Members of the public were able to attend the September 17, 2020 meeting, which was held virtually, due to COVID-19 concerns.²²

¹⁵ Application Volume 1, Section 3, Public Notice Evidence at 6, and Attachment C, Proof of Notice of Application.

¹⁶ *Id.*

¹⁷ Application Volume 1, Section 6, Public Notice Report at 9–11.

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.*

²¹ *Id.*

²² *Id.*

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 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, Flat Run Solar states the Project will be situated on land which can be generally described as acreage historically used for pasture and crop land.²³ Flat Run Solar further states that 18 percent of the surrounding acreage is defined as agricultural/residential, another 56

²³ Application Volume 1, Section 2, Description of Proposed Site at 4.

percent is purely agricultural, 15 percent is commercial, and 11 percent is defined as purely residential.²⁴

There are five nearby, non-participating neighboring residences to the Project at distances of approximately 150 feet, 200 feet, and 250 feet, and two residences approximately 350 feet from the potential project footprint. In addition, there are five nearby residences belonging to project landowners, who are leasing land to the proposed project, two within the Project's footprint, two within at 200 feet radius, and one within a 300 feet radius.²⁵ One of the adjacent properties is a compressor station owned by the Tennessee Gas Pipeline Company.²⁶

There are five proposed access points, or access roads, which will allow entrance to different areas of the property during construction. Those include three access points on Hobson Road; one from Saloma Road; and one on Squires Road.²⁷ Three of the five proposed construction entrances will likely continue to be used for ongoing operations, including two of the three along Hobson Road and the entrance along Saloma Road.²⁸ 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 internal roads of the

²⁴ Application, Volume 2, SAR at 25.

²⁵ *Id.*, Attachment C.

²⁶ BBC Report at 24.

²⁷ Application, Volume 2, SAR, Attachment A.

²⁸ Flat Run Solar's Response to Siting Board Staff's Second Request for Information (filed Feb. 25, 2021), Item 16.

Project will be compacted gravel. There are no railroads, spurs, or other rail facilities in the project area.²⁹

The utilities that serve the project include EKPC's Green County - Saloma 161 kV transmission line that will carry electricity generated by the project. If electricity service is required during construction or operation of the project, it will be contracted with Taylor County RECC. Utility water or sewer service will not be required, although, during construction, water may be required initially for irrigating the vegetative buffer until it is established or for controlling dust. This water would be trucked onto the site.

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

1. Flat Run Solar should provide a final site layout plan to the Siting Board upon completion of the final site design. Any change in project boundaries should be submitted to the Siting Board for review.

2. Flat Run Solar should control access to the site during construction and operation. All construction entrances should be gated and locked when not in use. Flat Run Solar's access control strategy should also include appropriate signage to warn potential trespassers. Flat Run Solar should ensure that all site entrances and boundaries have adequate signage, particularly in locations visible to the public, local residents, and business owners. According to the NESC regulations, the security fence must be installed prior to any electrical installation work.

Compatibility with Scenic Surroundings

²⁹ Application, Volume 2, SAR, Appendix F, Noise and Traffic Study, Sections 3.4 and 3.5.

The proposed Project site is comprised of gently rolling farmland, divided in the middle by an area of mature trees and wetlands.³⁰ Flat Run Solar has proposed to plant long stretches of vegetative buffers along segments of Hobson Road and Saloma Road, where the site would be highly visible.³¹ The primary road near the eastern boundary of the site, Old Lebanon Road, is mostly screened from the site by a combination of topography and existing vegetation.

Flat Run Solar asserts that its solar facility is a passive use of the land that would blend in with rural, agricultural surroundings.³² Flat Run Solar states that 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.³³ Flat Run Solar 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 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.³⁴

Flat Run Solar notes that it has not received any complaints of concerns from neighbors of the Project, during the public meeting held on September 17, 2020, or anytime outside of that.³⁵

³⁰ BBC Report at 11.

³¹ Application, Volume 2, SAR, Section 2, Compatibility with Scenic Surroundings at 8

³² *Id.*, Exhibit B, Property Value Impact Report at 105.

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.* at 8.

The BBC Report concludes the proposed facility would not be incompatible with the surrounding area from a scenic standpoint. The report notes Flat Run Solar's plans to install vegetative buffers along the primary roadways adjacent to the site, and the topography of the site, which eliminates its visibility from some nearby homes, forested areas in some portions of the site that break up the views, and the proposed screening plan. The BBC Report recommends the following mitigation measures to address visual impacts:

1. Existing vegetation between solar arrays and nearby roadways and homes should be left in place to the extent feasible to help minimize visual impacts and screen the project from nearby homeowners and travelers.

2. Flat Run Solar should carry out the screening plan proposed in its application and SAR, and make sure the proposed new vegetative buffers are successfully established and develop as expected over time.

3. If requested by any of the five non-participating residences within 350 feet of the proposed project along segments of the project boundary not currently proposed to have vegetative buffers, Flat Run Solar should provide additional vegetative screening in these areas.

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 Flat Run Solar will mitigate the effects the proposed facility will have on the scenic surroundings of the site. 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 finds the proposed mitigation measures are reasonable and, therefore, will require Flat Run Solar to implement the mitigation measures identified above, or as modified, with the additional mitigation measures outlined in Appendix A to this Order.

Impact on Property Values

With respect to impact on property values, Flat Run Solar 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 closest home to the proposed Flat Run Solar facility is 150 feet away from the closest solar panel while the average distance from panels to homes is 524 feet. Matched Pair data presented in the report shows no impact on home values as close as 105 feet when reasonable visual buffers are provided.³⁶ The report also indicates that the solar facility would function in a harmonious manner with the nearby surroundings, which is 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.³⁷

The BBC Report notes that the central issue with respect to property values impact is whether, and to what extent, the development and operation of the Flat Run Solar facility will cause nearby property values to change. The BBC Report reviewed Flat Run Solar's Property Value Impact Report, noting that the report contained a comparative

³⁶ Application, Volume 2, SAR, Attachment B, Property Value Impact Study at 4.

³⁷ See Application, Volume 2, SAR, Attachment B, Property Value Impact Study at 1.

study analyzing data from numerous solar facilities across the country of property values in proximity to such facilities with similar homes that are not in close proximity. The BBC Report states that the analysis performed on behalf of Flat Run Solar 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.³⁸

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.³⁹ However, the BBC Report states these findings were specific to solar sites in suburban areas. Nothing was found to have a statistically significant impact on home prices in rural settings such as the areas surrounding the proposed Flat Run Solar facility.

Based upon a review of Flat Run Solar's SAR, discovery responses, independent research, and information collected from the site visit, the BBC Report concludes that the Flat Run Solar facility will unlikely have any meaningful impacts on the property values of adjacent properties or other properties near the solar facility.

³⁸ BBC Report, Section C at 33.

³⁹ *Id.*

Having reviewed the record, the Siting Board finds that there is sufficient evidence to conclude that the proposed Flat Run Solar facility will more than likely not have any adverse impact on nearby property values. The characteristics of the solar facilities operations is passive in nature in that it does not produce any air, noise, waste, or water pollution nor does it create any traffic issues during operations.

Impact on Roads, Railways, and Fugitive Dust

With respect to the impact on roads, railways, and fugitive dust, Flat Run Solar's Noise and Traffic Study as part of its SAR notes the proposed solar site will have three construction entrances on KY Route 744, one along KY 527 and one along Squires Road.⁴⁰ Flat Run Solar states that it does not intend to use railways for any construction or operational activities.⁴¹ Flat Run Solar confirms it will comply with all signage and traffic lights required by the Kentucky Department of Transportation and any other governmental agencies.⁴²

It is expected that construction will take from 8 to 12 months to complete the solar facility.⁴³ Data from the Kentucky Transportation Cabinet (KYTC) Division of Planning estimate that an average of 1,558 vehicles per day (VPD) use the stretch of KY 285, 1,081 VPD use the stretch of KY 527, and an average of 943 VPD use the stretch of KY 744 surrounding the Project site.⁴⁴

⁴⁰ Application Volume 2, SAR, Attachment F at 166.

⁴¹ *Id.* at 168.

⁴² *Id.* at 167.

⁴³ *Id.*

⁴⁴ *Id.*, Table 3.1.

Flat Run Solar anticipates that during construction, up to 150 workers will access the site each day.⁴⁵ Flat Run Solar states that construction is not anticipated to encroach onto a state right-of-way other than vehicles accessing the site from existing and proposed driveways along KY Route 527, KY Route 744, and Chestnut Grove Road (to Squires Road).⁴⁶

The Noise and Traffic Study further finds that after construction is complete, during operations, the facility will have approximately two employees to staff the solar site. This volume of daily traffic is considered negligible and the operational phase of the project is not anticipated to adversely impact traffic in the area.⁴⁷

With respect to road degradation, Flat Run Solar states that generally, trucks and equipment arriving on a daily basis at the Project site will weigh no more than 20 tons (the majority being equipment delivery trucks).⁴⁸ 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 60 to 70 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 90 tons. There will be one substation transformer delivery for the Project.⁴⁹

Flat Run Solar recognizes construction and associated land disturbance associated with the proposed project may temporarily contribute airborne materials.

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Id.*

However, Flat Run Solar states the Project will utilize Best Management Practices such as monitoring weather, minimization of disturbance areas, and covering of open piles, to minimize dust.⁵⁰ Additionally, open-bodied trucks transporting dirt will move slowly and 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.⁵¹

The BBC Report indicates during the construction period, there could be noticeable effects on traffic volumes noticeable to local residents, but due to the low traffic levels at present, is unlikely to impact the level of service on roadways.⁵²

The BBC Report notes the following regarding road conditions and potential degradation of roadways:

The primary roads located near the proposed Project site—SR 744 and SR 527—are rated for 62,000 pounds and 44,000 pounds, respectively (KYTC Truck Weight Classification). Any vehicle loads exceeding this limit could subject the roadway and shoulder to damage or degradation. Additionally, potential routes to the site may also include local county roads, which would be susceptible to degradation from heavy loads.

The anticipated construction entrances on Hobson Road (KY 744) and Saloma Road (KY 527) — the northern and western boundaries of the site — are each abrupt, right angle turns from roadways where traffic currently moves at high rates of speed (50 MPH or greater). Proactive traffic management will be needed in order to assure the safety of the construction workers and other travelers along these roadways. Delivery of the 60-to-70-ton power transformer to the construction

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² BBC Report at 14.

entrance along Saloma Road (KY 527) will likely present challenges given the existing rating of the road for up to 44,000 pounds (22 tons).⁵³

The BBC Report states that these challenges can likely be overcome with careful advance planning.

The BBC Report ultimately finds that although no significant adverse transportation impacts are anticipated, it recommends Flat Run Solar pursue the following mitigation measures to ensure that impacts to roadways will be kept to a minimum:

- Flat Run Solar should develop and implement a traffic management plan for the construction phase of the project to minimize impacts on traffic flow and keep traffic safe. As part of this plan, Flat Run Solar should 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.
- Flat Run Solar should consult with the Kentucky Transportation Cabinet and the Taylor County road department as soon as feasible to discuss the anticipated construction related traffic and the transportation requirements for the power transformer and the KYTC's restrictions on SR 744 and SR 527. Flat Run Solar should obtain any necessary permits from these agencies.
- Flat Run Solar should commit to rectify any damage to public roads by fixing or fully compensating the appropriate transportation authorities for any damage or degradation to the existing road network that it causes or to which it materially contributes to.

The Siting Board finds that the mitigation measures, as recommended in the BBC Report, or as modified, with the additional mitigation measures outlined in Appendix A to

⁵³ *Id.*

this Order, are required to be implemented by Flat Run Solar to ensure that traffic impacts during construction are kept to a minimum.

Anticipated Noise Level

Flat Run Solar's Noise and Traffic Study indicates that the project area can be defined as agricultural, residential, or agricultural/residential area with three non-participating residents within 300 feet of the project boundary.⁵⁴ Flat Run Solar notes that a Tennessee Gas Pipeline Compressor Station is located northwest of the proposed site, which will have a significant contribution to the ambient sound level.

According to Flat Run Solar's Noise and Traffic Study,⁵⁵ the nearest non-participating residence is approximately 150 feet from the project boundary at the closest point.⁵⁶ Flat Run Solar in its application proposed an additional setback for central inverters of 150 feet from the property boundaries and 300 feet from the closest neighbor.⁵⁷ Flat Run Solar's proposed minimum setbacks for all other equipment will be 25 feet from non-participating adjoining parcels, 50 feet from adjacent roads, and 150 feet from non-participating residences.⁵⁸

Flat Run Solar provides that construction of the facility is expected to commence in February 2023 and be completed in October 2023.⁵⁹ The loudest source from

⁵⁴ Application, Volume 2, SAR, Appendix F, Noise and Traffic Study at 2.

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ Application, Volume 2, SAR at 5.

⁵⁸ *Id.*

⁵⁹ Flat Run Solar's Response to Siting Board Staff's Second Request for Information (filed June 25, 2021), Item 6.

construction is anticipated to be pile-driving equipment. The anticipated noise produced by pile-driving equipment will be 91.0 dBA at 150 feet.⁶⁰ Flat Run Solar proposes if noise levels during construction are unacceptable to nearby residents Flat Run solar shall mitigate the impact so that noise levels are no more than 95 dBA as measured at the neighboring residential home and further proposes a limit of 60 dBA at the noise receptor during the operation period.⁶¹ Flat Run Solar 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.⁶²

When the solar facility is operating, there will be periodic noise associated with the relatively constant noise of central inverters, string inverters, and the substation. The noise produced by the central inverters will be 63.1 dBA measured at 50 feet and 53.6 dBA at 150 feet.⁶³ Flat Run Solar stated that the nearest sound receptor to the central inverters would be at distance of 450 feet.⁶⁴ The noise produced by the string inverters will be 49.6 dBA measured at 50 feet and 40.0 dBA at 150 feet.⁶⁵ Flat Run Solar stated that the nearest sound receptor to the string inverters would be at a distance of 185 feet.⁶⁶ In its application, Flat Run Solar proposed the substation is to be located no

⁶⁰ Application, Volume 2, SAR, Appendix F, Noise and Traffic Study at 2.

⁶¹ Application, Volume 2, SAR at 12.

⁶² *Id at 3.*

⁶³ *Id at 3.*

⁶⁴ Flat Run Solar response to Siting Board's Second Request for Information, item 9.

⁶⁵ Application, Volume 2, SAR, Appendix F, Noise and Traffic Study at 4.

⁶⁶ Flat Run Solar's Response to Siting Board Staff's Second Request for Information (filed June 25, 2021), Item 8.

closer than 300 feet to the nearest non-participating residence,⁶⁷ which would produce 34.5 dBA at 200 feet and 22.5 dBA at 800 feet. Flat Run Solar later stated that the nearest sound receptor to the substation would be at distance of 890 feet.⁶⁸ Flat Run Solar states that it did not find any relevant county noise ordinance.⁶⁹

The BBC Report likewise notes that noise issues stem from construction activities and operational components of the solar facility. During construction, noise from the pile drivers will have substantial impact on residents. Participating project landowners with residences closer than 150 feet to pile drivers will experience noise levels greater than 95 dBA, with potential for damage to hearing. The BBC Report recommends when pile driving will occur within 1,500 feet of any nearby home or business, Flat Run Solar should implement a construction method to suppress the noise from the pile driving process.⁷⁰

The BBC report estimates, based on the setback requirements, that the operational noise of the facility should be 45 dBA or less at the nearest non-participating residence.⁷¹ The BBC Report concludes that during the operation of the proposed facility noise levels are unlikely to be disruptive to local residents.

To further ensure as little noise impacts as reasonably possible during the construction period, the Siting Board will require the following additional mitigation measures.

⁶⁷ Application, Volume 2, SAR at 5.

⁶⁸ Flat Run Solar's Response to Siting Board Staff's Second Request for Information (filed June 25, 2021), Item 7.

⁶⁹ Application, Volume 2, SAR, Appendix F, Noise and Traffic Study at 1.

⁷⁰ BBC Report, Section B at 8.

⁷¹ BBC Report, Section B at 5.

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

2. If pile-driving activity occurs within 1,500 feet of a noise sensitive receptor, Flat Run Solar shall implement a construction method that will suppress the noise generated during the pile driving process (i.e., semi-tractor and canvas method; sound blankets on fencing surrounding the solar site; or any other comparable method).

3. Flat Run Solar shall contact homes within 1,500 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 shall also provide the opportunity for residents to ask questions or provide feedback, if desired.

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 period—with no earlier start than 8 a.m. with a construction stop at 6 p.m., Monday through Saturday—shall be made. Non-noise-causing and non-construction activities can take place on the site between 7 a.m. and 10 p.m., Monday through Sunday, including field visits, arrival, departure, planning meetings, mowing, surveying, etc.

To further ensure as little noise and visual impacts as reasonably possible during the construction and operation periods, the Siting Board will require any additional mitigation measures outlined in Appendix A to this Order.

Mitigation Measures Proposed by Flat Run Solar

Flat Run Solar's SAR contained the following mitigation measures that it plans to implement:

1. Setbacks for solar equipment from roads and property lines, with increased setbacks for certain equipment, and additional setbacks from non-participating residential homes that are located relatively close to property lines:

- 50 feet from adjacent roadways
- 25 feet from non-participating adjoining parcels
- 150 feet from non-participating residences

Flat Run Solar proposes the following additional setbacks for central inverters, and, if used, energy storage systems:

- 150 feet from property boundaries
- 300 feet from non-participating residences

Flat Run Solar notes the security fencing, vegetative buffer and pollinator plantings shall not be subject to these setback restrictions.

2. Upon its completion, a final site layout plan shall be submitted to the Siting Board. Material deviations from the preliminary site layout plan which formed the basis for the instant review shall be clearly indicated on the revised graphic. Material changes are defined as changes to the following:

- a. Potential Project Footprint (as defined in Section 1)

- b. utility easement
- c. Project setbacks from property lines and roads
- d. Project setbacks from non-participating residential homes
- e. vegetative buffer locations and specification
- f. substation and interconnection equipment location
- g. parcel boundaries.

Flat Run Solar notes the Siting Board shall determine whether any material changes are likely to create a materially different pattern or magnitude of impacts. If not, no further action is required, but if that is the case, Flat Run shall support the Siting Board's effort to revise its assessment of impacts and mitigation requirements.

3. Planting of native evergreen species as a visual buffer to mitigate viewshed impacts; see the site development plan in Attachment A [of the SAR] for proposed planting areas, and Section 1 of the Application for the proposed specifications of the vegetative buffer. Plantings are primarily proposed in areas directly adjacent to the Project that lack existing vegetation. Members of the development team have met with neighbors to ensure they are aware of the Project and the locations of the proposed vegetative buffers.

4 Cultivation of at least 2 acres of native pollinator-friendly species on site; see the site development plan in Attachment A [of the SAR] for the anticipated pollinator area, and Section 1 of the Application for information about pollinators and solar.

5. Placing safety warning signs along the perimeter of the facility fence in accordance with the guidelines of the NESC and American National Standards Institute (ANSI) Z535 Safety Sign Standards for Electric Utility Power Plants and Substations.

6. Leaving existing vegetation between solar equipment and neighboring residences in place, to the extent practicable, to help screen the Project and reduce visual impacts.

7. Retrofit plan (If Flat Run proposes to retrofit the current proposed facility, it shall demonstrate to the Siting Board that the retrofit facility will not result in a material change in the pattern or magnitude of impacts compared to the original project. Otherwise, a new Site Assessment Report will be submitted for Siting Board review. Flat Run shall also prepare a new Site Assessment Report for Siting Board review if Flat Run intends to retire the currently proposed facility and employ a different technology.)

8. Construction activity, process and deliveries shall be limited to the hours of 7 a.m. and 9 p.m. daily.

9. Notices to neighbors regarding potential construction and operation noises, as described in Section 4.

10. Maximum noise levels during construction and operation, as described in Section 4.

11. The Project will obtain and comply with necessary permits regarding impacts to wetlands, waters of the US, and storm water.

12. The Project has completed an assessment of the current and historical uses of the Project site (ESA Phase I), and will comply with its recommendations where they apply to the solar facility.

13. Flat Run Solar, its successors or assigns, shall decommission the entire site if the Project ceases producing electricity for a period of more than twelve (12) months. Decommissioning shall involve the removal of all solar panels, racking, and equipment

including concrete pads and trenched electrical wiring. Fencing and internal access roads shall also be removed, unless the landowner states in writing that they prefer fencing and internal roads to remain in place.

14. Flat Run or its contractors will fix or pay for damage resulting from any vehicle transport to the project site, as may be required by the applicable transportation permits obtained from State and local road authorities, as described in Section 5.

The Siting Board has reviewed the mitigation measures that have either been proposed by Flat Run Solar or measures that have been accepted by Flat Run Solar in response to discovery requests or recommended in the BBC Report and have modified certain of those measures. Additionally, Flat Run Solar shall place panels, inverters and substation equipment consistent with distances to noise receptors indicated in Flat Run Solar's noise and traffic study.

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

The Siting Board finds that Flat Run Solar'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 Flat Run's economic impact report, the proposed solar facility will generate lasting and significant positive economic and fiscal impacts on the entire affected region and the state. 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. In the Application, Flat Run stated that it and the County government are in the process of negotiating an Industrial Revenue Bond and a financial agreement where it will make annual payments in lieu of taxes (PILOT) to local government jurisdictions. The project will pay approximately \$1.32 million in PILOT payments over the 40-year life of the proposed solar facility.⁷² At the September 8, 2021 Hearing, Flat Run stated that a PILOT agreement had been finalized with the Court and that Flat Run's payment to the County had increased to approximately \$1.485 million over the life of the project.⁷³ The estimated capital cost of the facility is approximately \$90-120 million.⁷⁴

During the project construction phase, Flat Run estimates that up to 199 workers will be hired over the 8-12 month construction period with a direct payroll of \$7.50

⁷² Application, Attachment N at 1 and 5. The Pilot agreement calls for payments of \$1,000 per MW of stated capacity for the first 20 years and then \$200 per MW for the next 20 years.

⁷³ Hearing Video Transcript of the Sept. 8, 2021 Hearing at 14:33:04-14:34:10.

⁷⁴ Application Attachment N at 1.

million.⁷⁵ The total economic impact is estimated to be 199 total full-time equivalent jobs in the County and new payroll of \$9.89 million.⁷⁶ The analysis focused on Taylor County only. The vast majority of these jobs will be filled by craft workers and contractors.⁷⁷ The 199 jobs translate to a projected injection of approximately \$9.89 million in new wages into the local economy, which will help support local businesses.⁷⁸ The ongoing economic impact from the project's operational phase is estimated to be very small relative to the one-time impacts from the construction phase. The ongoing operational phase of the project is expected to support 2-3 jobs.⁷⁹

BBC Research did not evaluate the economic impact of the project.

Having reviewed the record, the Siting Board finds that the Flat Run solar facility will have a positive economic impact on the region.

Local Planning and Zoning Requirements

Flat Run Solar states that the proposed solar facility will be located entirely in Taylor County. Flat Run Solar notes that Taylor County has not enacted any zoning ordinances or setback requirements for the location of the Flat Run Solar facility.⁸⁰ Flat Run Solar informs that there are no setback requirements established by a planning and zoning commission for the location of the project. Flat Run Solar submitted as part of its

⁷⁵ *Id.*

⁷⁶ *Id.* Attachment N at 4.

⁷⁷ See Flat Run's Responses to Siting Board's First Request for information (filed May 27, 2021), Item 7. In addition, Flat Run anticipates working with Green County Area Technology Center, which serves Taylor County, to train solar installers.

⁷⁸ *Id.*

⁷⁹ *Id.* at 4.

⁸⁰ Application, Volume 1, Section 4, Compliance with Local Ordinances and Regulations at 7.

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.⁸¹

The Siting Board finds that Flat Run Solar'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

Flat Run Solar states the Project is within the PJM Interconnection LLC (PJM) footprint and the interconnection of the project will be managed by PJM in coordination with EKPC, which owns the transmission infrastructure to which the Project will interconnect.⁸² The interconnection study process for PJM 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 Flat Run Solar facility to the PJM network at a location specified by Flat Run Solar. The purpose of the facilities study encompasses the engineering design work necessary to begin construction of required expansion plan upgrades identified by PJM to accommodate an interconnection request. PJM issued the Facilities Study Report on the Flat Run Solar project in January 2020.⁸³ The Feasibility Study shows that Flat Run Solar will be responsible for attachment

⁸¹ Application, Volume 1, Exhibit E, Certificate of Compliance at 43.

⁸² Application, Volume 1, Section 9, Effect on Kentucky Electricity Generation System at 14.

⁸³ Application, Volume 1, Attachment L, Feasibility Study Report at 67

facilities, direct connection network upgrade, and non-direct connection network upgrade costs of approximately \$8,140,000.⁸⁴

The System Impact Study determines potential impacts to the regional electric grid and the need for any network upgrades to mitigate potential impacts. PJM issued the System Impact Study Report for the Flat Run Solar facility in August 2020. The System Impact Study Report indicated that Flat Run Solar will be responsible for total interconnection costs, the same as noted in the Facilities Study, of approximately \$8,140,000 for upgrades to interconnection facilities and network facilities.⁸⁵

In its application, Flat Run Solar states the third and final step, the Facilities Study, is currently underway and expected to be issued in 2021.⁸⁶

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 Flat Run 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 Flat Run Solar'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 Flat Run Solar has satisfied the requirements of KRS 278.710(f).

⁸⁴ *Id.* at 69.

⁸⁵ Application, Volume 1, Attachment M, Systems Impact Study at 108.

⁸⁶ Application, Volume 1, Section 9, Effect on Kentucky Electricity Generation System at 14.

Compliance with Setback Requirements

Flat Run Solar'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. Flat Run Solar states that there are three residential neighborhoods within 2,000 feet of the proposed "structures or facilities used for generation of electricity." Flat Run Solar filed a motion, pursuant to KRS 278.704(4), seeking a deviation from the 2,000-foot setback requirement.⁸⁷

Flat Run Solar is seeking a deviation from the 2,000-foot setback requirement in KRS 278.704(2) for 700 feet from the three residential neighborhoods adjacent to the Project site, as measured from the nearest home in each neighborhood.⁸⁸ The nearest distances from each of the neighborhoods to the Project are 700 feet, 840 feet, and 1060 feet.

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),

⁸⁷ Flat Run Solar's Motion for Deviation from Setback Requirements (filed Apr. 30, 2021).

⁸⁸ *Id.*

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 no regulations have been promulgated regarding CEAs that would establish a fee for the processing of a CEA, Flat Run Solar developed a CEA for submission to the Cabinet. Flat Run Solar 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 Flat Run 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. There will be some minor air emissions during construction and operations from the use of vehicles and mowing, but no air quality permit is required for these construction or ancillary activities.

With respect to water evaluation, Flat Run Solar 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 best management practices, such as silt fences, in order to minimize the impacts of storm water runoff and will implement a storm water

pollution prevention plan to comply with KDOW requirements.⁸⁹ Flat Run Solar states that with the use of best management practices that will be followed to minimize impacts associated with construction.⁹⁰

The Siting Board finds that if wetlands or streams are disturbed during construction or operation, they shall only be disturbed according to applicable law, including the securing of any necessary permits.

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. Flat Run Solar 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 exempt small quantity generator. Any hazardous waste will be managed offsite at a permitted facility.⁹¹

With respect to managing water withdrawal and usage, the Flat Run 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.

⁸⁹ *Id.* at 9–10.

⁹⁰ *Id.* at 10.

⁹¹ *Id.*

Similar to other solar facilities, the Flat Run Solar project is not water intensive during the operational phase.⁹²

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

⁹² *Id.*

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. Flat Run Solar 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. Flat Run Solar states that it is not a utility under the jurisdiction of the Kentucky PSC. However, Flat Run Solar 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. Flat Run Solar 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 Flat Run Solar, Flat Run Solar states that it will abide by the applicable rules and regulations that govern its operation.

KRS 278.700 *et seq.* governs the Siting Board's jurisdiction and process. Flat Run Solar states that it has met the goals set forth in these provisions as evidenced by the

application in its entirety. Flat Run Solar 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 Flat Run Solar 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 to the distances requested and 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, Flat Run Solar 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. These setbacks shall not be required for residences owned by landowners involved in the project that explicitly agree to lesser setbacks, and have done so in writing. Evidence of that agreement shall be filed with the Siting Board as indicated in Appendix A.

History of Environmental Compliance

Flat Run Solar 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.

Flat Run Solar further states that there are no pending actions against it nor any entity with ownership interest in the proposed solar project.⁹³

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

Decommissioning

According to Flat Run Solar, the proposed solar facility could potentially have an expected useful life of 40 years.⁹⁴ While Flat Run Solar has not formally entered into a decommissioning plan, it has committed to the terms of the draft decommissioning plan submitted to the Siting Board herein.⁹⁵ The decommissioning plan provides for removal of the basic components of the Project, including photovoltaic (PV) modules, mechanical racking system, electrical cabling, inverter racks, transformers and concrete pads. The decommissioning plan also provides that "All modules will be disconnected, removed from the trackers, packaged and transported to a designated location for resale, recycling or disposal. Any disposal or recycling will be done in accordance with applicable laws and requirements."⁹⁶ Likewise, "All decommissioning of electrical devices, equipment, and wiring/cabling will be in accordance with local, state and federal laws."⁹⁷ Pursuant to the

⁹³ Application, Volume 1 at 17.

⁹⁴ Application, Volume 1 at 16 (noting the PILOT agreement that has been reached spans 40 years).

⁹⁵ Flat Run Solar's Response to Staff's Second Request (filed June 25, 2021), Item 15; *See also* Hearing Video Transcript at the Sept. 8, 2021 Hearing at 2:17:45.

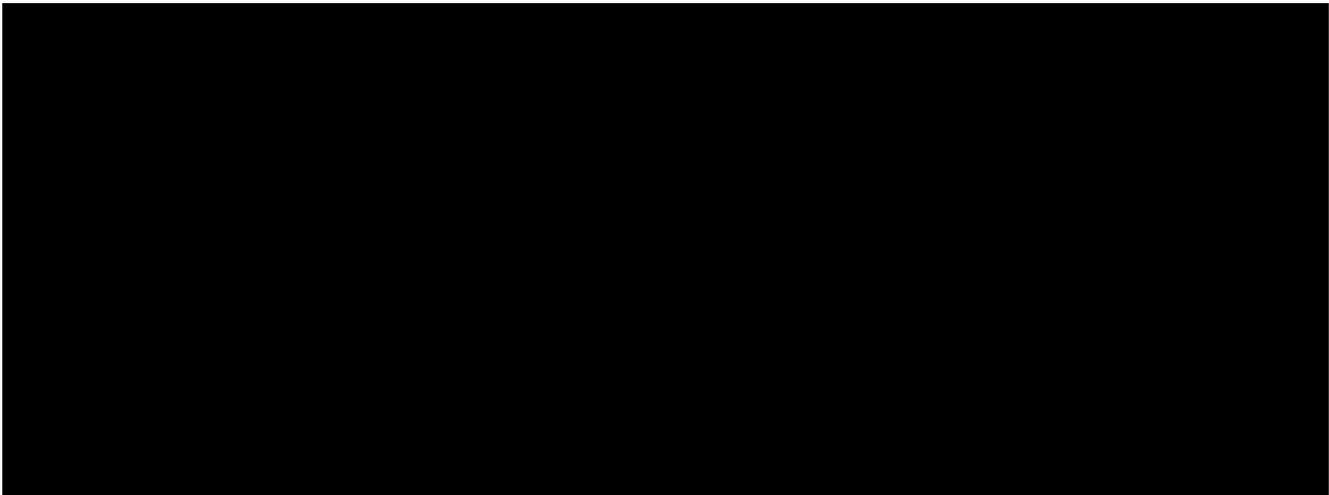
⁹⁶ *Id.*

⁹⁷ *Id.*

decommissioning plan, activities such as site cleanup, re-grading to original contours, filling of any trenches or drains caused by excavation, and tilling of compacted ground will occur to restore the site to substantially its previous condition.⁹⁸

The decommissioning plan also states that Flat Run Solar will be filing a bond, with the primary beneficiary being the landowner, and secondary beneficiary being the county, and will include the industry standard calculation, which will be reviewed and re-assess every five years by a licensed Engineer.⁹⁹

Decommissioning is also generally provided for under the individual lease agreements, which provide the following terms:



The BBC Report does not comment on decommissioning of Flat Run Solar's 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

⁹⁸ *Id.*

⁹⁹ *Id.*

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. Flat Run Solar shall file its full and explicit decommissioning plan with the Siting Board upon completion. This plan shall commit Flat Run Solar to removing all facility components, above-ground and below-ground, regardless of depth, from the project site and Taylor County at the cessation of operations. So long as the facility components are properly disposed of, they do not have to be physically removed from Taylor County. Upon its completion, this plan shall be filed with the Siting Board or its successors. The decommissioning plan shall be completed at least one month prior to construction of the Project.

2. Flat Run Solar shall be required to file a bond, equal to the amount necessary to effectuate the explicit decommissioning plan naming Taylor County as a third-party (or secondary, in addition to individual landowners) beneficiary, in addition to the lessors of the subject property insofar as the leases contain a decommissioning bonding requirement, so that Taylor County will have the authority to draw upon the bond to effectuate the decommissioning plan. For land in which there is no bonding requirement otherwise, Taylor County shall be the primary beneficiary of the decommissioning bond for that portion of the project. The bond(s) shall be filed with the Taylor County Treasurer or with a bank, title company or financial institution reasonably acceptable to the county. That acceptance can be evidenced by a letter from the Judge Executive, the fiscal court, or the County Attorney. 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 Flat Run Solar'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 Taylor 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.

3. If any person shall acquire or transfer ownership of, or control, or the right to control the Project, by sale of assets, transfer of stock, or otherwise, or abandon the same, Flat Run Solar or its successors or assigns shall provide explicit notice to the Siting Board and the Taylor County Fiscal Court.

4. Flat Run Solar or its assigns must provide notice to the Siting Board if during any two-year period, it replaces more than twenty percent of its facilities.

The Siting Board will require Flat Run Solar to implement the decommissioning measures set forth in Appendix A, 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 Flat Run Solar 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. Flat Run Solar's application for a Certificate to Construct an approximately 55 MWac merchant solar electric generating facility in Taylor County, Kentucky, is conditionally granted subject to full compliance with the mitigation measures and condition prescribed in Appendix A.

2. Flat Run Solar's motion for deviation from the 2,000-foot setback requirement is granted in part, such that the following setbacks shall apply to each of the three neighborhoods to the project: (1) 700 feet for Neighborhood A, (2) 840 feet for Neighborhood B, and (3) 1,060 feet from Neighborhood C. In addition, the following setbacks shall also apply: (1) Central Inverters shall be no closer to a noise receptor than or 450 feet, (2) String Inverters 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, except for the location of the inverters. These setbacks shall not be required for residences owned by landowners involved in the project that explicitly agree to lesser setbacks, and have done so in writing. All agreements by participating landowners to lesser setbacks must be filed with the Siting Board prior to commencement of construction of the Project.

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

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

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

By the Kentucky State Board on Electric
Generation and Transmission Siting



ATTEST:

A handwritten signature in blue ink, appearing to read "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. 2020-00272

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING IN CASE NO. 2020-00272 DATED SEP 29 2021

MITIGATION MEASURES AND CONDITIONS IMPOSED

The following mitigation measures and conditions are hereby imposed on Flat Run Solar, LLC (Flat Run Solar 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 solar arrays and nearby roadways and homes shall be left in place to the extent feasible to help minimize visual impacts and screen the project from nearby homeowners and travelers.

10. Flat Run Solar shall implement planting of native evergreen species as a visual buffer to mitigate viewshed impacts, particularly in areas directly adjacent to the Project without existing vegetation.

11. Flat Run Solar shall carry out the screening plan as proposed in its application and SAR and ensure the proposed new vegetative buffers are successfully

established and develop as expected over time. Should vegetation used as buffers die over time, Flat Run Solar shall replace them as appropriate.

12. If requested by any of the 5 non-participating residences within 350 feet of the proposed project along segments of the project boundary not currently proposed to have vegetative buffers, Flat Run Solar shall provide additional vegetative screening in these areas. Complaints regarding this measure may be facilitated by the Siting Board.

13. Flat Run Solar shall cultivate at least two acres of native pollinator-friendly species onsite.

14. Flat Run Solar 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.

15. Flat Run Solar shall fix or pay for damage resulting from any vehicle transport to the project site. For damage resulting from vehicle transport in accordance with all permits, those permits will be controlling.

16. Flat Run Solar shall comply with all laws and regulations regarding the use of roadways.

17. Flat Run Solar shall consult with the Kentucky Transportation Cabinet (KYTC) regarding truck and other construction traffic and obtain necessary permits from the KYTC.

18. Flat Run Solar shall consult with Taylor County Road Department (TCRD) regarding truck and other construction traffic and obtain necessary permits from the TCRD.

19. Flat Run Solar shall comply with any road use agreement executed with TCRD. Such an agreement might consider special considerations for overweight loads, routes utilized by heavy trucks, road weight limits, and bridge weight limits.

20. Flat Run Solar shall properly maintain construction equipment and follow best management practices related to fugitive dust throughout the construction process. This should keep dust impacts to a minimal level.

21. Flat Run Solar shall develop and implement a traffic management plan to minimize the impacts on traffic flow 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.

22. Flat Run Solar is required to limit the construction activity, process, and deliveries to the hours between 8 a.m. and 6 p.m. Monday through Saturday. Non-noise-causing and non-construction activities can take place on the site between 7 a.m. and 10 p.m., Monday through Sunday, including field visits, arrival, departure, planning meetings, mowing, surveying, etc.

23. Flat Run Solar 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.

24. Flat Run Solar shall contact homes within 1,500 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. Flat Run Solar shall also provide the opportunity for residents to ask questions or provide feedback, if desired.

25. If the pile driving activity occurs within 1,500 feet of a noise sensitive receptor, Flat Run Solar shall implement a construction method that will suppress the noise generated during the pile driving process (i.e., semi-tractor and canvas method; sound blankets on fencing surrounding the solar site; or any other comparable method).¹⁰⁰

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

27. Flat Run Solar shall place panels, inverters and substation equipment consistent with the distances to noise receptors indicated in Flat Run Solar's noise and traffic study. Nevertheless, Flat Run Solar shall not place solar panels or string inverters closer than 150 feet from a residence, and shall not place a central inverter closer than 450 feet from a residence. These setbacks shall not be required for residences owned by landowners involved in the project that explicitly agree to lesser setbacks, and have done so in writing. All agreements by participating landowners to lesser setbacks must be filed with the Siting Board prior to commencement of construction of the Project.

¹⁰⁰ Flat Run Solar's Response to Siting Board Staff's Post-Hearing Request for Information (filed May 25, 2021), Item 2.

28. Flat Run Solar shall implement ridesharing between construction workers when feasible, use appropriate traffic controls or allow flexible working hours outside of peak hours to minimize any potential delays during AM and PM peak hours.

29. As applicable to individual lease agreements, Flat Run Solar, 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.

30. Flat Run Solar shall file its full and explicit decommissioning plan with the Siting Board upon completion. This plan shall commit Flat Run Solar to removing all facility components, above-ground and below-ground, regardless of depth, from the project site and Taylor County at the cessation of operations. If the facility components are properly disposed of at a permitted facility, they do not have to be physically removed from Taylor County. Upon its completion, this plan shall be filed with the Siting Board or its successors. The decommissioning plan shall be completed at least one month prior to construction of the Project.

31. Flat Run Solar shall be required to file a bond, equal to the amount necessary to effectuate the explicit decommissioning plan naming Taylor County as a third-party (or secondary, in addition to individual landowners) beneficiary, in addition to the lessors of the subject property insofar as the leases contain a decommissioning bonding requirement, so that Taylor County will have the authority to draw upon the bond to effectuate the decommissioning plan. For land in which there is no bonding requirement otherwise, Taylor County shall be the primary beneficiary of the decommissioning bond for that portion of the project. The bond(s) shall be filed with the Taylor County Treasurer or with a bank, title company or financial institution reasonably

acceptable to the county. That acceptance can be evidenced by a letter from the Judge Executive, the fiscal court, or the County Attorney. 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 Flat Run Solar'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 Taylor 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.

32. If any person shall acquire or transfer ownership of, or control, or the right to control the Project, by sale of assets, transfer of stock, or otherwise, or abandon the same, Flat Run Solar or its successors or assigns shall provide explicit notice to the Siting Board and the Taylor County Fiscal Court.

33. Flat Run Solar or its assigns must provide notice to the Siting Board if during any two-year period, it replaces more than twenty percent of its facilities.

34. Any disposal or recycling of Project equipment, during operations or decommissioning of the Project, shall be done in accordance with applicable laws and requirements.

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY STATE BOARD ON
ELECTRIC GENERATION AND TRANSMISSION SITING IN
CASE NO. 2020-00272 DATED SEP 29 2021

Flat Run Solar, LLC Site Map

ONE PAGE TO FOLLOW

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

50ft min. setback from all Paved Roads

Tennessee Gas Pipeline Co Facility

Planted Pollinator Species

150' Minimum Setback From Homes

Substation and Interconnection Equipment Area

(1) The Purpose of this plan is for a 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.
(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 will be locked with a standard keyed or combination lock. Emergency personnel will be provided a key or combination for access.

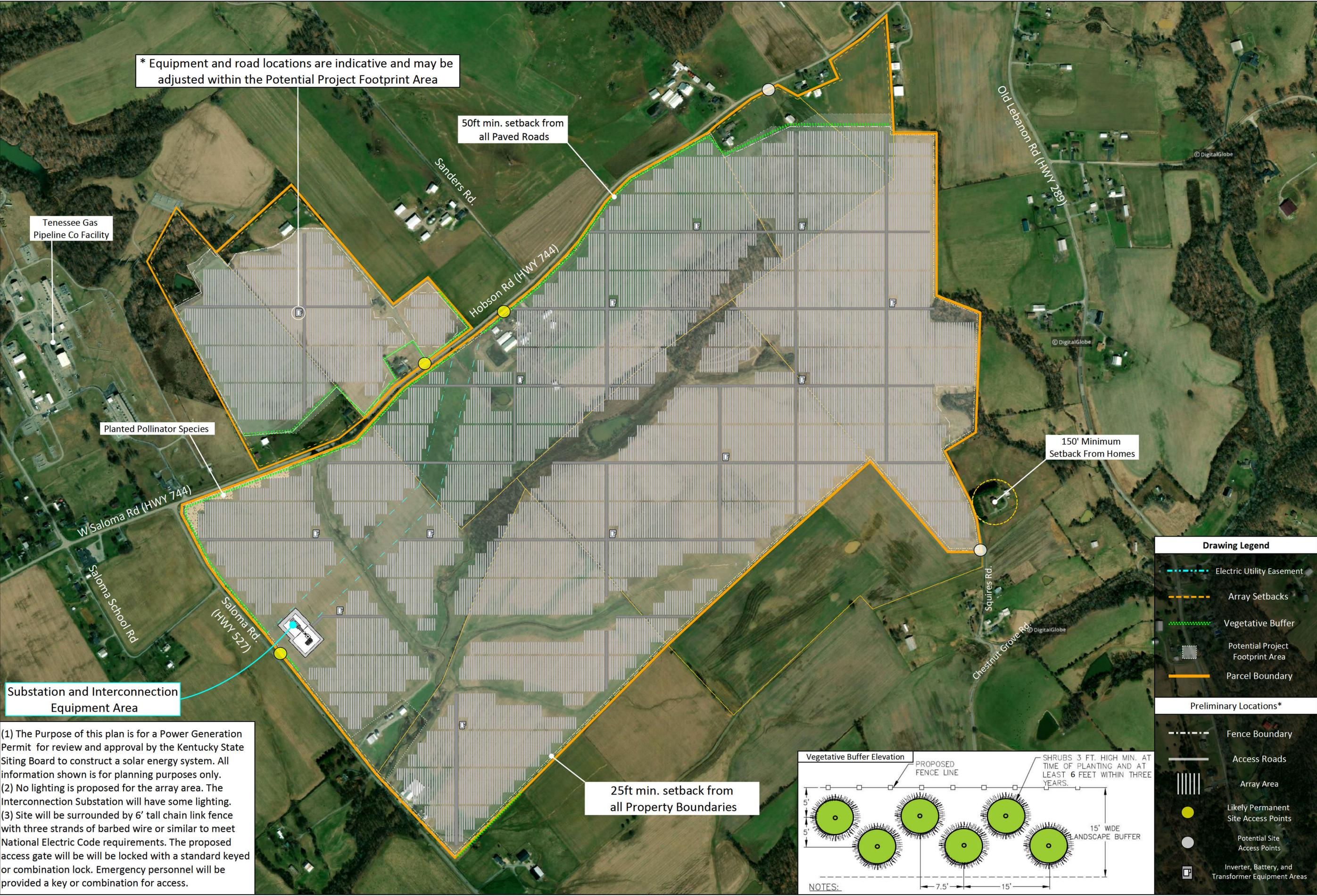
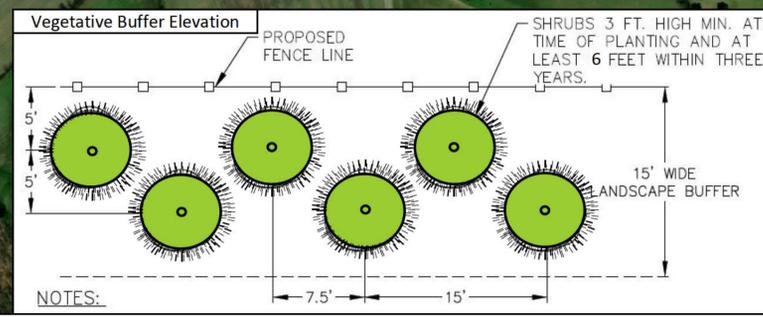
25ft min. setback from all Property Boundaries

Drawing Legend

- Electric Utility Easement
- Array Setbacks
- Vegetative Buffer
- Potential Project Footprint Area
- Parcel Boundary

Preliminary Locations*

- Fence Boundary
- Access Roads
- Array Area
- Likely Permanent Site Access Points
- Potential Site Access Points
- Inverter, Battery, and Transformer Equipment Areas



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