

Banjo Creek Solar LLC
Kentucky State Board on Electric
Generation and Transmission Siting
Application

Application Documents
Case No. 2023-00263

September 2023



APPLICATION OF BANJO CREEK SOLAR LLC
FOR A CONSTRUCTION CERTIFICATE TO CONSTRUCT A
MERCHANT ELECTRIC GENERATING FACILITY
GRAVES COUNTY, KENTUCKY
CASE NO. 2023-00263

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1. Applicant Information

REQUIREMENT: per KRS 278.706 (2)(a); *The name, address, and telephone number of the person proposing to construct and own the merchant electric generating facility.*

COMPLIANCE: Please see below for the requested information.

- Name: Banjo Creek Solar LLC
Attn: Jonathan Flemings
- Address: 1900 South Blvd
Suite 306
Charlotte, NC 28023
- Phone: (704) 712 - 4916

2. Description of Proposed Site

REQUIREMENT: per KRS 278.706 (2)(b); *A full description of the proposed site, including a map showing the distance of the proposed site from residential neighborhoods, the nearest residential structures, schools, and public and private parks that are located within a two (2) mile radius of the proposed facility.*

COMPLIANCE: A new 120-megawatt alternating current (AC) solar photovoltaic (PV) facility and 30-megawatt AC battery energy storage system, known as the Banjo Creek Solar Project (Project), is proposed to be built in Graves County, Kentucky. If built, the Project would connect to Tennessee Valley Authority's adjacent existing Paris–Mayfield 161-kilovolt transmission line. The proposed solar PV facility is on approximately 1,106 acres.¹ The Project site is located approximately eight miles southeast of the city of Mayfield and 10 miles west of the city of Murray.

The Project is within a rural agricultural area and is bisected by Kentucky Route 339 (KY 339)/Antioch Church Road, KY 564, and Wilferd Road, and is bounded to the east by Beech Grove Road. KY 339/Antioch Church Road extends east-west through the southern portion of the Project and KY 564 extends north-south through the eastern portion of the Project. The Project is predominantly flat to gently sloping agricultural land with strips of forested areas buffering property lines and some wetlands, streams, and ponds. Structures such as residences and agricultural buildings (barns, garages, silos) are also present, primarily along roads within or contiguous to the Project.

The solar facility would consist of a solar array proposed to contain crystalline silicon or thin film PV panels attached to ground-mounted single-axis trackers, central inverters, several medium voltage transformers and a main power transformer, a substation, a battery energy storage system, a switching station, an operations and maintenance building, access roads, and all associated cabling and safety equipment. The placement of the facility components would minimize impacts to environmental resources to the maximum extent possible.

The PV modules attached to single-axis trackers would follow the path of the sun from the east to the west across the sky. Groups of panels would be connected electrically in series to form strings of panels, with the maximum string size chosen to ensure the maximum inverter input voltage is not exceeded by the string voltage at the Project's high design temperature. The panels, estimated to be approximately 6.6 feet by 4 feet, would be situated in individual blocks consisting of the PV arrays and an inverter station on a concrete pad or steel piles, to convert the direct current electricity generated by the solar panels into AC electricity. The PV panel and inverter blocks in close vicinity and not separated by public roads would be enclosed together by chain-link security fencing.

¹ Banjo Creek Solar LLC controls a total of 1,270 acres of land in Graves County; however, due to development restrictions, the Project site as referenced in this application is 1,106 acres.

There are no public or private parks, nursing homes, or hospitals within a two-mile radius of the Project site. A map showing residential neighborhoods, the nearest residential structures, schools, and churches in the vicinity of the Project is presented in Attachment A.

3. Public Notice Evidence

REQUIREMENT: per KRS 278.706 (2)(c); *Evidence of public notice that shall include the location of the proposed site and a general description of the project, state that the proposed construction is subject to approval by the board, and provide the telephone number and address of the Public Service Commission. Public notice shall be given within thirty (30) days immediately preceding the application filing to:*

- 1. Landowners whose property borders the proposed site; and*
- 2. The general public in a newspaper of general circulation in the county or municipality in which the facility is proposed to be located.*

COMPLIANCE: Attachment B contains a sample letter that was sent out via certified mail on August 31, 2023, to announce this application to landowners whose property borders the proposed site. The list of the names and addresses of those landowners, as well as copies of the certified mail receipts are included in Attachment B.

Attachment B also includes the public notice announcing this application that was published on August 23, 2023, in the *Mayfield Messenger*, the newspaper of general circulation in Graves County.

4. Compliance with Local Ordinances and Regulations

REQUIREMENT: per KRS 278.706 (2)(d); *A statement certifying that the proposed plant will be in compliance with all local ordinances and regulations concerning noise control and with any local planning and zoning ordinances. The statement shall also disclose setback requirements established by the planning and zoning commission as provided under KRS 278.704(3).*

COMPLIANCE: : The Project is located in Graves County. The County has not enacted any planning, zoning, or permitting requirements for the Project location. There are no setback requirements established by a planning and zoning commission for the Project location and no noise control ordinance applicable to the project.

Banjo Creek Solar LLC certifies that the Project will be in compliance with all local ordinances and regulations concerning noise control, and with any applicable local planning and zoning ordinances that were valid and existed on the date the application is filed, pursuant to KRS 278.710(1)(e). A statement certifying these facts is submitted as Attachment C.

5. Setback Requirements

REQUIREMENT: per KRS 278.706 (2)(e); *If the facility is not proposed to be located on a site of a former coal processing plant and the facility will use on-site waste coal as a fuel source or in an area where a planning and zoning commission has established a setback requirement pursuant to KRS 278.704(3), a statement that the exhaust stack of the proposed facility and any wind turbine is at least one thousand (1,000) feet from the property boundary of any adjoining property owner and all proposed structures or facilities used for generation of electricity are two thousand (2,000) feet from any residential neighborhood, school, hospital, or nursing home facility, unless facilities capable of generating ten megawatts (10 MW) or more currently exist on the site. If the facility is proposed to be located on a site of a former coal processing plant and the facility will use on-site waste coal as a fuel source, a statement that the proposed site is compatible with the setback requirements provided under KRS 278.704(5). If the facility is proposed to be located in a jurisdiction that has established setback requirements pursuant to KRS 278.704(3), a statement that the proposed site is in compliance with those established setback requirements.*

COMPLIANCE: The Project is not proposed to be located on the site of a former coal processing plant, nor will it use any waste coal as a fuel source. No existing electricity generating facilities are located on the Project site. Graves County has no setback requirements for this location, per the information provided in Section 4. The Project will not include any exhaust stacks or wind turbines as part of the facility, so the 1,000-foot boundary requirement is not applicable.

There is only one residential neighborhood (as defined by KRS 278.700[6]) within 2,000 feet of the Project's facilities. Pursuant to KRS 278.704(4), AEUG Fleming Solar will be moving the Siting Board for a deviation from this setback requirement. See Appendix A for a map showing the residential neighborhood in relation to the Project.

6. Public Involvement Activities

REQUIREMENT: per KRS 278.706 (2)(f); *A complete report of the applicant's public involvement program activities undertaken prior to the filing of the application, including:*

- 1. The scheduling and conducting of a public meeting in the county or counties in which the proposed facility will be constructed at least ninety (90) days prior to the filing of an application, for the purpose of informing the public of the project being considered and receiving comment on it;*
- 2. Evidence that notice of the time, subject, and location of the meeting was published in the newspaper of general circulation in the county, and that individual notice was mailed to all owners of property adjoining the proposed project at least two (2) weeks prior to the meeting; and*
- 3. Any use of media coverage, direct mailing, fliers, newsletters, additional public meetings, establishment of a community advisory group, and any other efforts to obtain local involvement in the siting process.*

COMPLIANCE:

Banjo Creek Solar LLC presented details on the Project during two public meetings held at the Sedalia Cafe in Sedalia. The first of these meetings was held between 2:00 PM and 4:00 PM on April 1, 2023, and the second meeting was held between 5:30 PM and 7:45 PM on June 6, 2023. Neighboring landowners to the Project were invited by two mailers (see Attachment D) to the 1 April open house. The 1 April 2023 open house was attended by at least seventeen people (see Attachment D for the sign-in sheet; many did not sign-in). During the open house meeting, Banjo Creek Solar announced a Project website, banjocreeksolar.com, where people can access frequently asked questions and answers and submit questions. The 6 June 2023 public meeting was originally scheduled for 16 May but later rescheduled to 6 June. Notices were sent to all neighboring landowners on 28 April by certified mail and the public meeting advertised on 29 April 2023, in the *Mayfield Messenger*, the newspaper of general circulation in Graves County. The reschedule notice was sent to all neighboring landowners on 12 May via FedEx and the schedule change was advertised in the *Mayfield Messenger* on 13 May. The 6 June 2023 public meeting was likewise well attended by more than ten neighbors (see Attachment D for the sign-up sheet and photos of the meeting). The 6 June 2023 public meeting and notices thereof satisfy the requirement of KRS 278.706(2)(f) of a public meeting at least 90 days in advance of the filing of the application.

During both meetings food was provided by Sedalia Café, and attendees were shown a virtual simulation video of the completed project and a site plan of the Project. During the meeting, Banjo Creek Solar representatives presented details on the Project, including (1) the Project site acreage, (2) the anticipated disturbance footprint, electrical output, and key components of the proposed facility, (3) that a TVA-led National Environmental Policy Act (NEPA) environmental

review of the Project will be required, and (4) the economic benefits of the Project to the local community. Maps showing the Project site location and the preliminary design, were on display for the public to view. Banjo Creek Solar representatives also provided material on FAQs and a North Carolina study on solar and land use. The presentation on the Project was followed by a lengthy question-and-answer session and time for informal conversations, during which GreenGo representatives were available for questions and group or one-on-one discussions. The attendees at both meetings were also encouraged to reach out to Banjo Creek Solar with comments and concerns as Project planning proceeds. Specific contact details were provided to the attendees. On 15 and 16 May 2023, a Banjo Creek Solar met personally with four of the neighboring property owners to discuss Banjo Creek Solar's proposed project and site plan adjustments made after the 1 April 2023 open house to accommodate concerns expressed at the open house.

See Attachment D for the materials related to the open house and public meeting.

Attachment D presents copies of the mailers sent by USPS on 15 March and 23 March to invite neighboring landowners to the 1 April open house, as well as April 28 and May 12 notices to neighboring landowners for the public meeting. The April 28 notice was mailed to each landowner via Certified mail; also see Attachment D for the certified mail receipts and list of notice recipients. The May 12 notice was delivered via FedEx; see Attachment D for the FedEx documentation. Attachment D also includes the public meeting notices published in the *Mayfield Messenger* on April 29 and on 13 May.

The environmental review required by TVA, pursuant to NEPA, will provide another official opportunity for public comment on the Project in 2024. TVA will announce the release of the environmental assessment (EA) presenting the results of the NEPA environmental review on their website and in one or more local news sources. The release of the draft EA will initiate a 30-day public comment period. Substantive comments will be addressed in the final EA, the availability of which will be announced by TVA. The upcoming EA public comment period was announced during both public meetings.

Other efforts to obtain local involvement in the siting process included interfacing with Graves County Economic Development, the Graves County Judge Executives and County Commissioners, and with the West Kentucky Rural Electric Cooperative (WKRECC).

Banjo Creek Solar representatives contacted Graves County Economic Development in late 2020 prior to signing any leases in Graves County and have remained in regular communication with the Economic Development office since, with the first in-person meeting held on 10 March 2021 with many more to follow. Representatives of Banjo Creek Solar met with the County Judge Executive on 2 August 2022 for an informative meeting to present the project details. A meeting between Banjo Creek Solar representatives and WKRECC was held on 30 March 2023 to inform WKRECC of the general characteristics of the Project.

7. Efforts to locate near Existing Electric Generation

REQUIREMENT: per KRS 278.706 (2)(g); *A summary of the efforts made by the applicant to locate the proposed facility on a site where existing electric generating facilities are located.*

COMPLIANCE: It is rare for utility-scale solar projects to be co-located with existing electricity generating infrastructure, such as a coal or natural gas fired power plant. As a result of Applicant's efforts, this Project is located on land adjacent to an existing TVA transmission line (TL).

The Project proposes connecting to TVA's adjacent existing Paris–Mayfield 161-kilovolt TL, which extends north-northwest to south-southeast through the southeast corner of the Project site. The proposed solar facility would interconnect to this TL and carry the power generated by the facility. Banjo Creek Solar LLC would construct an on-site substation and TVA would construct a switching station in the southwestern portion of the Project site that would connect the solar facility to the existing TVA TL via a short gen-tie TL. A battery energy storage system and an operations and maintenance building would be built adjacent to the substation. Information on TVA's studies of the interconnection cost and infrastructure are included in the System Impact Study, Attachment E, which is being filed with a request for confidential treatment.

Efforts were made to site the Project where there is existing electricity transmission infrastructure. The proposed interconnection is to on-site existing infrastructure owned by TVA to be used for the sale and distribution of energy created by the Project.

8. Proof of Service to County and Municipality Officials

REQUIREMENT: per KRS 278.706 (2)(h); *Proof of service of a copy of the application upon the chief executive officer of each county and municipal corporation in which the proposed facility is to be located, and upon the chief officer of each public agency charged with the duty of planning land use in the jurisdiction in which the facility is proposed to be located.*

COMPLIANCE: As indicated in the Certificate of Service, a copy of the Siting Board Application for Banjo Creek Solar was electronically transmitted to the Judge/Executive of Graves County, Jesse Perry, on the date of the electronic filing of this application.

9. Effect Upon Kentucky Electricity Transmission System

REQUIREMENT: per KRS 278.706 (2)(i); *An analysis of the proposed facility's projected effect on the electricity transmission system in Kentucky.*

COMPLIANCE: The Project is proposed to interconnect to Tennessee Valley Authority's (TVA) electric system in Kentucky. TVA's service area covers Tennessee and portions of Alabama, Georgia, Kentucky, Mississippi, North Carolina, and Virginia. TVA manages the interconnection of the Project and is the transmission owner of the proposed point of interconnection, the Paris–Mayfield 161-kilovolt transmission line.

The interconnection process for TVA involves three major studies: the Feasibility Study (optional), System Impact Study (required), and Facilities Study (required).

Banjo Creek Solar LLC opted out of the optional Feasibility Study.

The System Impact Study identifies any adverse system impacts on the TVA transmission system, including local power companies and neighboring transmission systems. No potentially affected systems were identified resulting from this proposed interconnection. The System Impact Study Report was issued on May 4, 2023 and can be found in Attachment E, which is being filed with a request for confidential treatment.

The final Facilities Study is currently in progress and expected to be issued by Summer/Fall 2024.

10. Local Economic Impact

REQUIREMENT: per KRS 278.706 (2)(j); *An analysis of the proposed facility's economic impact on the affected region and the state.*

COMPLIANCE: Attachment F includes a full report on the impact of the Project on local and regional economics. On page 1 of the report, it states:

“The company plans to invest approximately \$248 million to develop the Project, including both hard and soft costs, both on the ground in Kentucky and outside the state. This note provides estimates of the new local economic and fiscal activity expected from the development.

There are two primary impacts expected from the Project. First, there will be a spike in construction and linked jobs as the site is built out over approximately one to one and a half years. Using estimates of the construction payroll, I estimate that there will be a total (direct and spinoff) of 323 new jobs in the County in year one, with new labor compensation of \$23.1 million.

The Graves County Fiscal Court levies an occupational tax of one percent on employees' wages, salaries and other compensation. If all the construction-related compensation were taxed, this would yield a one-time increase of \$231,000 in new tax revenue. The company has provided me with tax projections related to their capital expenditures. Over the first forty years, Kentucky state government is projected to receive \$4.7 million over the subsequent four decades. Local jurisdictions would receive \$3.2 million, of which \$2.1 million would go to the County school system. The thirteen land parcels generated about \$7,000 in property tax revenues for local jurisdictions in 2022. The Graves County Solar Project – Banjo Creek 2 Project is projected to generate an average of \$80,000 in property tax revenues locally per year for over forty years. This is approximately eleven and a half times larger than current property tax payments from the farmland.”

11. Record of Environmental Violations

REQUIREMENT: per KRS 278.706 (2)(k); *A detailed listing of all violations by it, or any person with an ownership interest, of federal or state environmental laws, rules, or administrative regulations, whether judicial or administrative, where violations have resulted in criminal convictions or civil or administrative fines exceeding five thousand dollars (\$5,000). The status of any pending action, whether judicial or administrative, shall also be submitted.*

COMPLIANCE: Neither Banjo Creek Solar LLC, nor any entity with direct ownership interest in the Project, has violated any state or federal environmental laws or regulations. There are no pending actions against Banjo Creek Solar LLC, nor any entity with direct ownership interest in the Project.

12. Site Assessment Report

REQUIREMENT: per KRS 278.706 (2)(l); *A site assessment report as specified in KRS 278.708. The applicant may submit and the board may accept documentation of compliance with the National Environmental Policy Act (NEPA) rather than a site assessment report.*

COMPLIANCE: The Site Assessment report is being contemporaneously filed herewith; please see the separate document titled "Banjo Creek Solar: Site Assessment Report" in Attachment G.

13. Decommissioning Plan

REQUIREMENT: *A decommissioning plan that shall describe how the merchant electric generating facility will be decommissioned and dismantled following the end of its useful life. The decommissioning plan shall, at a minimum, include plans to:*

- 1. Unless otherwise requested by the landowner, remove all above-ground facilities;*
- 2. Unless otherwise requested by the landowner, remove any underground components and foundations of above-ground facilities. Facilities removed under this subparagraph shall be removed to a depth of three (3) feet below the surface grade of the land in or on which the component was installed, unless the landowner and the applicant otherwise agree to a different depth;*
- 3. Return the land to a substantially similar state as it was prior to the commencement of construction;*
- 4. Unless otherwise requested by the landowner, leave any interconnection or other facilities in place for future use at the completion of the decommissioning process;*
- 5. Secure a bond or other similar security for the project to assure financial performance of the decommissioning obligation, provided that:*

a. The amount of the proposed bond or similar security shall be determined by an independent, licensed engineer who is experienced in the decommissioning of solar electric generating facilities and has no financial interest in either the merchant electric generating facility or any parcel of land upon which the merchant electric generating facility is located. The proposed amount of the bond or similar security shall be either:

- i. The net present value of the total estimated cost of completing the decommissioning plan, less the current net salvage value of the merchant electric generating facility's components; or*
- ii. The bond amount required by a county or municipal government that has established a decommissioning bond requirement or similar security obligation in the county or municipality where the merchant electric generating facility will be located. If the facility will be located in more than one (1) county or municipality that has established a decommissioning bond or similar security obligation, then the higher amount shall be required for the facility;*

b. The bond or other similar security names:

- i. For property that is leased by the applicant, each landowner from whom the applicant leases land and the Energy and Environment Cabinet as the primary co-beneficiaries; or*
- ii. For property that is owned by the applicant, the Energy and Environment Cabinet as the primary beneficiary;*

c. If the merchant electric generating facility is to be located in a county or municipality that has not established a decommissioning bond or other similar security obligation, the bond or other similar security shall name the county or municipality as a secondary beneficiary with the county's or municipality's consent;

d. The bond or other similar security shall be provided by an insurance company

or surety that shall at all times maintain at least an "Excellent" rating as measured by the AM Best rating agency or an investment grade credit rating by any national credit rating agency and, if available, shall be noncancelable by the provider or the customer until completion of the decommissioning plan or until a replacement bond is secured; and

e. The bond or other similar security shall provide that at least thirty (30) days prior to its cancellation or lapse, the surety shall notify the applicant, its successor or assign, each landowner, the Energy and Environment Cabinet, and the county or city in which the facility is located of the impending cancellation or lapse. The notice shall specify the reason for the cancellation or lapse and provide any of the parties, either jointly or separately, the opportunity to cure the cancellation or lapse prior to it becoming effective. The applicant, its successor, or its assign, shall be responsible for all costs incurred by all parties to cure the cancellation or lapse of the bond. Each landowner, or the Energy and Environment Cabinet with the prior approval of each landowner, may make a demand on the bond and initiate and complete the decommissioning plan.

6. Communicate with each affected landowner at the end of the merchant electric generating facility's useful life so that any requests of the landowner that are in addition to the minimum requirements set forth in this paragraph and in addition to any other requirements specified in the lease with the landowner may, in the sole discretion of the applicant or its successor or assign, be accommodated; and

7. Incorporate the requirements of paragraphs (m)1. to 6. of this subsection into the applicant's leases with landowners.

COMPLIANCE: The Decommissioning Plan is included as Attachment H.

14. Cumulative Environmental Assessment Summary

REQUIREMENT: per KRS 224.10-280; *Cumulative environmental assessment and fee required before construction of facility for generating electricity -- Conditions imposed by cabinet -- Administrative regulations.*

(1) Except for a person that commenced construction of a facility prior to April 15, 2002, or that has received a certificate of public convenience and necessity from the Public Service Commission prior to April 15, 2002, no person shall commence to construct a facility to be used for the generation of electricity unless the person:

(a) Submits a cumulative environmental assessment to the cabinet with the permit application; and

(b) Remits a fee set pursuant to KRS 224.10-100(20) by the cabinet to defray the cost of processing the cumulative environmental assessment.

(2) The person may submit and the cabinet may accept documentation of compliance with the National Environmental Policy Act (NEPA) as satisfying the requirements to file a cumulative environmental assessment under subsection (1) of this section.

(3) The cumulative environmental assessment shall contain a description, with appropriate analytical support, of:

(a) For air pollutants:

- 1. Types and quantities of air pollutants that will be emitted from the facility; and*
- 2. A description of the methods to be used to control those emissions;*

(b) For water pollutants:

- 1. Types and quantities of water pollutants that will be discharged from the facility into the waters of the Commonwealth; and*
- 2. A description of the methods to be used to control those discharges;*

(c) For wastes:

- 1. Types and quantities of wastes that will be generated by the facility; and*
 - 2. A description of the methods to be used to manage and dispose of such wastes;*
- and*

(d) For water withdrawal:

- 1. Identification of the source and volume of anticipated water withdrawal needed to support facility construction and operations; and*
- 2. A description of the methods to be used for managing water usage and withdrawal.*

(4) The cabinet may impose such conditions regarding the timing, volume, duration, or type of pollutants on a permit, registration, general permit, or permit-by-rule for a facility subject to this section as are necessary to comply with applicable standards.

(5) The cabinet may promulgate administrative regulations to implement the provisions of this section.

COMPLIANCE: The Banjo Creek Solar Project (Project) may temporarily contribute to increased air pollutants, water pollutants, water withdrawal, and wastes. Most of the potential air quality impacts associated with the Project would occur during construction. Construction

activities would create emissions from construction equipment and vehicles, contracted employees' personal vehicles, and fugitive dust suspension from clearing, grading, and other activities. Combustion of gasoline and diesel fuels by internal combustion engines (haul trucks and off-road vehicles) would generate local emissions of particulate matter (PM), nitrogen oxides, carbon monoxide, volatile organic compounds, and sulfur dioxide. The total amount of these emissions would be small and, overall, would result in negligible air quality impacts.

As necessary, fugitive dust emissions from construction areas and paved and unpaved roads would be mitigated using best management practices (BMPs) including wet suppression. Wet suppression can reduce fugitive dust emissions from roadways and unpaved areas by as much as 95 percent. Therefore, direct impacts to air quality associated with construction activities would be expected to be minor. The operation of the Project is not anticipated to have any negative impacts to air quality or greenhouse gas emissions. No emissions would be produced by the operation of the solar facility or transmission lines. The nearly emissions-free power generated by the solar facility would offset the need for new power that would otherwise be generated, at least in part, by the combustion of fossil fuels.

Construction activities may increase erosion and sedimentation which could affect streams and wetlands in or immediately adjacent to the Project site. To minimize impacts, the Project would work with the existing landscape (e.g., slope, drainage, utilization of existing roads) where feasible and minimize or eliminate grading work to the extent possible. Grading activities would be performed with earthmoving equipment and would result in a consistent slope. Off-site sediment migration would be minimized by the placement of silt fences around each area of ground disturbance within the Project site. Other appropriate controls, such as temporary cover, would be used as needed to minimize exposure of soil and to prevent eroded soil from leaving the work area. To manage stormwater during construction, on-site temporary sedimentation basins, sediment traps, or diversion berms would be constructed within the disturbed area of the Project site. The Project would comply with the terms of a stormwater pollution prevention plan prepared as part of the Kentucky Pollutant Discharge Elimination System permitting process. Erosion control measures would be inspected and maintained until vegetation in the disturbed areas is stable. If necessary, only herbicides that are USEPA-registered and TVA-approved would be utilized for vegetation control at the Project site.

Water used during construction would be provided via delivery by water trucks or withdrawal via on-site groundwater wells. If wells are selected, Banjo Creek Solar LLC would conduct groundwater drilling and testing to gather information on aquifer characteristics and develop a plan for the well design. If required, water-based drilling muds would be collected and dewatered, with runoff occurring locally into nearby field areas. If necessary, sewer treatment would be accomplished through use of a pump-out septic holding tank. If installed, groundwater wells and the septic holding tank would be appropriately permitted and constructed to avoid impacts to groundwater.

The primary use of water during construction would be for compaction and dust control during grading and earthwork. The primary uses of water during operation and maintenance would be for dust control, equipment washing and potential restroom facilities. The use of BMPs to properly maintain vehicles to avoid leaks and spills and procedures to immediately address any spills that did occur would minimize the potential for adverse impacts to groundwater. If a Groundwater Protection Plan is determined to be necessary for the proposed Project under KAR Title 401 5:037, the Project would comply with all requirements of that plan and any additional requirements determined to be necessary by the Kentucky Division of Water. Overall, impacts on local aquifers and groundwater are not anticipated due to the limited volume of

groundwater required for initial construction, operation, maintenance, or decommissioning and closure. Implementation of BMPs and a Decommissioning and Closure Plan would reduce the potential for hazardous materials to reach groundwater resources throughout construction and operations of the facility.

Storage and use of liquid materials in the form of petroleum-based oils and fuels, and generation of liquid and solid wastes in the form of used oil, construction debris, packing materials, and general construction waste would occur during construction and would be minor and temporary. All applicable federal, state, and local regulatory requirements would be followed in the collection and disposal of waste to minimize health and safety effects.

During operations, bulk chemicals would be stored in storage tanks and other chemicals would be stored in returnable delivery containers. The transport, storage, handling, and use of chemicals would be conducted in accordance with applicable laws, ordinances, regulations, and standards. While the various transformers would contain oil, there would be no separate transformer oil stored on site related to transformers. Banjo Creek Solar LLC would develop and implement a variety of plans and programs to ensure safe handling, storage, and use of hazardous materials (e.g., Hazardous Material Business Plan). Waste collection and disposal would be conducted in accordance with applicable regulatory requirements to minimize health and safety effects.

Wastewater potentially generated during construction or operations may include domestic sewage and wastewater from non-detergent equipment washing and dust control. Portable toilets or other temporary facilities would be used for the construction workforce. Water used for equipment washing and dust control would be handled in accordance with BMPs described in the Project stormwater/BMP plan. With application of these BMPs, no adverse effects would be anticipated from wastewater generated during the Project.

The Cumulative Environmental Assessment will be submitted separately to the Cabinet.