

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

In the Matter of:

ELECTRONIC APPLICATION OF FLEMING)	
SOLAR, LLC FOR A CERTIFICATE OF)	
CONSTRUCTION FOR AN APPROXIMATELY)	
80 MEGAWATT MERCHANT ELECTRIC)	Case No. 2020-00370
SOLAR GENERATING FACILITY IN FLEMING)	
COUNTY, KENTUCKY PURSUANT TO)	
KRS 278.700 AND 807 KAR 5:110)	

**FLEMING SOLAR LLC'S
MOTION FOR DEVIATION FROM SETBACK REQUIREMENTS**

Fleming Solar LLC (“Fleming Solar” or “Applicant”) moves the Kentucky State Board on Electric Generation and Transmission Siting (“Board”) pursuant to KRS 278.704(4) for a deviation from the setback requirements in KRS 278.704(2). Fleming Solar is contemporaneously filing with the Board an application under KRS 278.706 for a construction certificate to construct an approximately 80 megawatt solar electric generating facility in unincorporated Fleming County, Kentucky (the “Project”). The nature of Fleming Solar’s Project and the mitigation measures proposed mean that a deviation should be granted.

I. THE FLEMING SOLAR PROJECT

The proposed Fleming Solar Project is to be located northwest of the City of Flemingsburg, north of Old Convict Road. The Project will be situated within 830 acres of land which have historically been used for agriculture and farming. Project equipment onsite will consist of photovoltaic solar panels, single-axis trackers, inverters and associated transformers, a step-up transformer, interconnection facilities to an existing East Kentucky Power Cooperative transmission line, and an associated wiring and balance of system. The land comprising and

adjacent to the Project site is sparsely populated. However, there are multiple residences located on parcels adjacent to those parcels where project equipment will be located.

Project equipment will be spread throughout the Project site based on topography, landowner approvals, and engineering requirements. Because there will be variations to the layout over time as the Project enters later stages of development, Fleming Solar has identified a Potential Project Footprint within the Project Boundary. The Project Boundary is defined as the outer parcel boundaries for any parcel (or portion of a parcel) that is the subject to a lease, purchase, or easement through an existing option agreement, which allows for construction activities or the operation of Project components on that parcel. The Potential Project Footprint represents the furthest extent that generating equipment will be located in the Project's final design within the Project Boundary. This area will be enclosed with a security fence and is approximately 725 acres. Fleming Solar established the Potential Project Footprint using a setback of 300 feet from the Project Boundary if there is a nearby residence and 50 feet from the Project Boundary if there is no nearby residence. For the purpose of establishing the Potential Project Footprint, residences are considered "nearby" if they are located within 300 feet of the Project Boundary. The Project Boundary and Potential Project Footprint are identified in **Exhibit 1** to this motion.

II. STATUTORY SETBACK REQUIREMENTS

In relevant part, KRS 278.704(2) establishes setback requirements for merchant electric generating facilities as follows:

Except as provided in subsections (3), (4), and (5) of this section, no construction certificate shall be issued to construct a merchant electric generating facility unless 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.¹

¹ KRS 278.704(2).

A. 1,000 Foot Setback Requirement

As a solar generating facility, the Project does not include any exhaust stacks or wind turbines. Accordingly, the one thousand foot setback from property boundaries does not apply.

B. 2,000 Foot Setback Requirement

There are no schools, hospitals, or nursing home facilities within 2,000 feet of the Project. There are however, six (6) residential neighborhoods, as defined in KRS 278.700(6), within 2,000 feet of the Project. KRS 278.700(6) defines a residential neighborhood as “a populated area of five (5) or more acres containing at least one (1) residential structure per acre.”² These neighborhoods are identified in the map included as **Exhibit 2** to this motion and described below.

Neighborhood A - located along Old Convict Road, directly across the road from the southern of the Project Boundary. The closest residence in Neighborhood A is 362 feet from the Potential Project Footprint.

Neighborhood B - located along Helena Road adjacent to the eastern Project Boundary. The closest residence in Neighborhood B is 426 feet from the Potential Project Footprint. A church is located within this neighborhood.

Neighborhood C - located along Maysville Road directly across the road from the northeastern Project Boundary. The closest residence in Neighborhood C is 415 feet from the Potential Project Footprint.

Neighborhood D - located along Helena Road approximately 800 feet to the north of the northern Project Boundary.

Neighborhood E - located off Maysville Road approximately 1,800 feet to the east of the eastern Project Boundary.

² KRS 278.700(6).

Neighborhood F - located off Maysville Road approximately 2,000 feet to the north of the northern-most Project Boundary. Only one residence within Neighborhood F is within 2,000 feet of the Project Boundary.

Fleming Solar respectfully seeks a deviation from the 2,000 foot setback requirement in KRS 278.704(2) to allow it to place generating equipment within the Potential Project Footprint, no closer than 300 feet from the Property Boundary adjacent to the identified residential neighborhoods.

II. SETBACK DEVIATION STANDARDS

KRS 278.704(4) authorizes the Board to grant Fleming Solar a deviation from the 2,000 foot setback requirement in KRS 278.704(2) if it finds that the Project is “designed to and, as located, would meet the goals of KRS 224.10-280, 278.010, 278.212, 278.214, 278.216, 278.218, and 278.700 to 278.716 at a distance closer than those provided in subsection (2) of this section.”³ The Board has previously stated that the purpose of the setback requirements in KRS 278.704(2) is to protect property owners from the adverse impacts that might result from the construction of merchant electric generation facilities.⁴ In particular, the Board highlighted the need to address the noise, visual, and traffic impacts of the merchant electric generation facilities.⁵

The Fleming Solar Project is designed to minimize the impacts on the six (6) neighborhoods. Additionally, the Project has been designed to and will meet the goals of the statutes referenced in KRS 278.704(4). Deviation from the setback requirements in KRS 287.704(2) is appropriate.

³ KRS278.704(4)

⁴ Order, *In the Matter of Application of ecoPower Generation-Hazard, LLC for a Certificate to Construct and Operate a Merchant Electric Generating Facility and a 69KV Transmission Line in Perry County, Kentucky* (“ecoPower Order”) at 32-33, Case No. 2009-00530 (Ky. P.S.C. May 18, 2010).

⁵ *Id.* at 33.

III. ARGUMENT

A. The Project’s Impacts on the Neighborhoods are Minimal

Fleming Solar has designed the Project to minimize impacts on the environment and the neighboring community. The Site Assessment Report, required by KRS 278.708 and included as Exhibit I to Fleming Solar’s Application, describes the Project’s anticipated noise, visual, and traffic impacts as well as proposed mitigation measures for each. The noise, visual, and traffic impact studies included in the Site Assessment Report were based on the Potential Project Footprint.

1. Noise Impacts

Appendix C to the Site Assessment report includes a thorough evaluation of anticipated noise impacts of Project construction and operation (“Noise Assessment”).

(a). Noise Impacts During Construction

Noise during construction of the Project will be temporary and will vary depending on the phase of construction. The Noise Assessment determined that sound levels generated by construction equipment would range from 70 to 125 A-weighted decibels (dBA) at the source with the loudest piece of equipment being a pile driver.⁶ The Noise Assessment determined the anticipated noise levels from a pile driver as follows:⁷

Anticipated Noise Produced by Very Loud Construction Equipment (pile driver)	
Distance from Source to Receptor (feet)	Sound Level Experienced at Receptor (dBA)
25	106.6
50	100.6
100	94.5
150	91.0
200	88.5
300	85.0

⁶ Noise Assessment at 3-4.

⁷ *Id.* at 4.

500	80.6
1,000	74.5
1,500	71.0

At 300 feet, the noise from pile driving activities would be the approximate equivalent to that produced by a household hair dryer.⁸ Pile driving activities require the equipment to move around the site as piles are driven and, therefore, the equipment (and the noise) does not remain in each area of the Project site for long periods of time.⁹ The Noise Assessment concludes that “the impact to the local sound environment due to construction is anticipated to be minor and temporary.”¹⁰

(b). Noise Impacts During Operation.

Noise during operation of the Project is anticipated to primarily arise from three sources: inverters (including medium-voltage transformers); heating, ventilation, and air-conditioning (“HVAC”) units; and the substation generation step-up (“GSU”) transformer.¹¹ The Noise Assessment estimated noise from these three sources as follows:¹²

Inverters	
Distance (feet)	dBA
3	85.6
50	61.2
100	55.1
150	51.6
200	49.1
300	45.6
400	43.1
800	37.1

HVAC Units	
Distance (feet)	dBA
3	67.0
50	42.6
100	36.5
150	33.0
200	30.5
300	27.0
400	24.5
800	18.5

GSU Transformer	
Distance (feet)	dBA
3	71.0
50	46.6
100	40.5
150	37.0
200	34.5
300	31.0
400	28.5
800	22.5

⁸ *Id.*

⁹ *Id.* at 5.

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.* at 6-7 (Tables 4, 5, and 6).

The Noise Assessment estimated that the ambient daytime outside sound level in the Project area would average between 50.0 and 60.0 dBA and those areas immediately adjacent to primary and secondary roadways in the vicinity would experience higher average levels of 60.0 to 70.0 dBA depending on time of day and traffic levels.¹³ The Noise Assessment addressed the cumulative impact of operational noise from the Project in light of the proposed setbacks (described below) and the estimated ambient noise levels in the area.¹⁴ The evaluation concluded that the changes in sound level would be less than the average human ear's sensitivity to such changes.¹⁵

(c). Noise-Related Mitigation Measures.

Fleming Solar is proposing the following mitigation measures to limit the impact of noise from construction and operation of the Project on neighboring landowners:

1. Construction activities are anticipated to be transient in nature and of a limited duration, ending once construction has been completed, and taking place daily between 7:30 AM to 7:00 PM, with two exceptions:
 - (a). pile driving activities within 1,000 feet of a non-participating landowners will be restricted to the hours of 9:00 AM - 5:00 PM, and
 - (b). no heavy construction activities (including pile driving) will take place prior to noon on Sundays. Fleming Solar or its EPC contractor will provide the opportunity to meet with a church representative on a quarterly basis during construction to accommodate any additional special events (holidays, weddings, baptisms, etc.).
2. Fleming Solar will notify residents and businesses within 2,400 feet of the Project boundary about the construction plan, noise potential, and mitigation plans at least one month prior to the start of construction.
3. Fleming Solar will establish a dedicated voicemail and email prior to construction of the Project. This information will be provided to city and county officials, emergency responders, schools, and public libraries, and neighboring residents within the Project Area. This information will also be posted on the Project website. To register a complaint or

¹³ *Id.* at 7.

¹⁴ *Id.* at 8-9.

¹⁵ *Id.* at 9.

concern, individuals may either call the voicemail, send an email, or submit a form on the website.

4. All complaints and concerns will be responded to within five business days.

5. Fleming Solar will comply with the following minimum setbacks for Project equipment:

(a). Substation GSU transformer/HVAC:

- 300 feet from the Project Boundary

(b). Inverters:

- 300 feet from the Project Boundary adjacent to non-participating parcels with nearby residences
- 150 feet from the Project Boundary adjacent to non-participating parcels without nearby residences.

(c). All other equipment:

- 300 feet from the Project Boundary adjacent to non-participating parcels with nearby residences
- 50 feet from the Project Boundary adjacent to non-participating parcels without nearby residences
- 50 feet from adjacent roads

With the mitigation measures proposed, including the setbacks for Project equipment, noise levels from Project construction would be limited and levels from Project operation would not be a significant contributor of noise in the Project area.

2. Visual Impacts

The visual impacts of the Project are described in the Site Assessment Report¹⁶ as well as in the site-specific Visual Assessment¹⁷ and a Solar Glare Hazard Report.¹⁸ The Fleming Solar

¹⁶ See, Site Assessment Report (Exhibit I), Section 2.0.

¹⁷ The Visual Assessment is Appendix D to the Site Assessment Report.

¹⁸ The Solar Glare Hazard Report is Appendix E to the Site Assessment Report.

Project is located with a rural/residential area, typical of utility-scale solar projects. The Visual Assessment concluded:

To the best ability, through the completion of the Visual Assessment, GAI has reviewed all possible scenarios where visual impacts could have been made by the community from the adjacent residences and along the right-of-way surrounding the project site. The assessment provided Core Solar [Fleming Solar's parent company] with a better understanding of where landscape screening would need to be considered, and thus they have made the proper alteration to their layout as seen in Attachment A (Preliminary Site Map). The facility is proposed to be well screened by existing and proposed vegetation, as well as structures associated with the development. It should be noted that all screening solutions benefit those who reside nearest the project, while areas such as roadways and rural residential development located outside of built communities could have possible elevated views towards the project site. This does present the opportunity of views that could vary from completely screened to partially and unobstructed screening with every attempt made towards screening the proposed development.¹⁹

Additionally, the Solar Glare Hazard Report concluded that there was no potential for glare predicted.²⁰

(a). Visual Impact-Related Mitigation Measures.

Fleming Solar is proposing the following mitigation measures to limit the visual impact of the Project on neighboring landowners:

1. Existing vegetation between perimeter of the solar arrays and the residences will be left in place, to the extent practicable, to help screen the Project and reduce visual impacts from the adjacent homes.
2. Existing field vegetation will be left in place to the extent possible, so no extensive disturbances occur for the development of the proposed facility. Where construction clears the site, the vegetative cover will be restored following construction in that area to allow vegetation to take root prior to operating the facility.
3. To the extent practicable, a solar pollinator seed mix will be used in areas where vegetative disturbance takes place during site construction. A minimum of six (6) acres will be maintained as pollinator habitat.
4. Landscape screening will extend and connect to existing site vegetation, to help create a more natural transition between existing vegetation and developed.

¹⁹ Visual Assessment at 2-3.

²⁰ Solar Glare Hazard Report at 1.

5. The proposed vegetative screen will be planted with evergreen shrubs and small trees (such as cedar or arborvitae) to limit the view of the solar PV facility from the roadway or adjacent properties.
6. Evergreen trees planted as part of the vegetative screen will be a minimum of 8 feet tall within four (4) years of planting. Vegetation will be maintained or replaced as needed.
7. The landscape screen placement will be adapted in consultation with GAI (or another consultant with similar experience), if panel placement varies in final design.
8. Fleming Solar will continue to work with homeowners and business owners to address concerns related to the visual impact of the Project on its neighbors.
9. Fleming Solar or its EPC Contractor will utilize anti-reflective coated panels to minimize glare.

Through the Project's design and proposed mitigation measures, the Fleming Solar Project is in harmony with its surroundings.

3. Traffic Impacts

Appendix C to the Site Assessment Report also includes a thorough evaluation of anticipated impacts of Project construction and operation on traffic ("Traffic Evaluation"). The Traffic Evaluation began with a review of existing data on traffic volumes in the vicinity²¹ of the Project and a determination of anticipated construction related trips to the Project. The Traffic Evaluation identified the following construction trips, to the site entrances and the planned remote worker parking site:²²

²¹ Traffic Evaluation at 9-10.

²² *Id.* at 12.

Anticipated Daily and Peak Hour Construction Vehicles to the Project per Entrance

Vehicle Type	Average Daily Vehicles¹	Maximum Daily Vehicles²	Average Peak Hour Vehicles³	Maximum Peak Hour Vehicles⁴
<i>Remote Parking Site</i>				
Employee	125	250	125	250
Shuttle ⁵	15	20	2	5
Totals	140	270	127	255
<i>KY Route 559 Main Entrance and Construction Laydown Entrance</i>				
Shuttle ⁵	15	20	2	5
On-Site Vehicle ⁵	25	75	10	27
Delivery Truck	5	10	2	2
Oversized Truck	1	5	1	1
Visitor	4	25	5	25
Totals	50	135	20	60
<i>KY Route 11 North Entrance</i>				
Shuttle ⁵	15	20	2	5
On-Site Vehicle ⁵	25	75	7	27
Delivery Truck	5	10	1	3
Totals	45	105	10	35

During Project operation, the Traffic Evaluation determined that the two plant operators, plant manager and warehouse attendant would only average 20 daily trips to the Project site.²³ As such a detailed traffic impact study was not required by Kentucky Transportation Cabinet policy.²⁴ The Traffic Evaluation concluded that the construction and operation of the Project would not result in overall level of service degradations:

Due to the low traffic volumes of existing roadways near the proposed Fleming Solar Project and the nature of temporary anticipated traffic impacts during construction and operation of the Project, overall level of service degradations are not anticipated. Some short-term traffic impacts to the nearby state highways in vicinity of site driveways are anticipated during deliveries, especially with occasional oversized vehicle use; however, appropriate traffic control such as warning signs and flaggers will be provided during construction to minimize traffic impacts. Roadway conditions will be maintained through the permitting process. Once completed, the Project will have two to four employees per shift, three shifts per day, so long-term traffic impacts will not be created due to the low number of trips. Fleming Solar will restore roadways impacted by construction as required

²³ *Id.* at 14.

²⁴ *Id.*

through the permitting process. Dust impacts are anticipated to be minor, and the contractor will develop and implement a plan to minimize dust impacts.²⁵

(a). Traffic Impact-Related Mitigation Measures.

Fleming Solar is proposing the following mitigation measures to limit the traffic impact of the Project on neighboring landowners:

1. The EPC contractor will provide adequate traffic control signs and devices that are compliant with Manual on Uniform Traffic Control Devices. These will include work zone signage and KYTC-certified flaggers to facilitate safe construction deliveries. Due to its narrow width, the contractor will need to conduct traffic stoppages on KY Route 559 (Old Convict Road) during construction to accommodate larger trucks. With an AADT of 147 vehicles per day and a peak hour traffic volume of approximately 18 vehicles per hour, traffic impacts will be temporary in nature and will be minor. There may also be temporary stoppages along KY Route 559 (Old Convict Road), KY Route 1200 (Helena Road), and KY Route 11 (Maysville Road) to facilitate deliveries in and out of site driveways. Disruptions to local property owners will be coordinated during construction.
2. The construction contractor will document roadway conditions in accordance with all applicable transportation permits obtained from State and local road authorities before construction commences and will be responsible for restoring impacted roadway to pre-construction conditions as required through the permitting process. Consideration will be given to coordinating delivery schedules to minimize the need for trucks to pass each other on KY Route 559 (Old Convict Road). No improvements are anticipated to be required to existing roadways for Project construction.
3. Fleming Solar will properly maintain construction equipment and follow BMPs related to fugitive dust throughout the construction process. This should keep dust impacts off-site to a minimal level.

Construction and operation of the Fleming Solar Project will not significantly impact traffic in the vicinity of the six neighborhoods or the Project site as a whole.

B. The Project Meets the Goals of the Statutes Identified in KRS 278.704(4).

In addition to being designed and operated to minimize the impacts on neighboring residents, the Fleming Solar Project meets the goals of KRS 224.10-280, 278.010, 278.212, 278.214, 278.216, 278.218, and 278.700 to 278.716 as required by KRS 278.704(4).

²⁵ *Id.* at 15.

1. KRS 224.10-280

KRS 224.10-280 provides that, prior to constructing a facility to be used for the generation of electricity, a developer must submit a cumulative environmental assessment (CEA) to the Energy and Environment Cabinet and pay a fee set pursuant to KRS 224.10-100(2). There have been no regulations promulgated regarding the contents of a CEA and no fee established to defray the costs of processing the cumulative. Despite this, Fleming Solar prepared a CEA that will be submitted to the Cabinet prior to construction.²⁶ As described below, the CEA shows that the Fleming Solar Project will have limited negative environmental impacts.

(a) *Air Evaluation (KRS 224.10-280(3)(a))*

KRS 224.10-280(3)(a) requires that the CEA for the Project evaluate the types and quantities of air pollutants that will be emitted by the Project and a description of the methods that will be used to control those emissions. The CEA identified that the Project will generate temporary air pollution emissions during construction activities.²⁷ These emissions will arise from primarily from the staging of equipment and supplies and the operation of vehicles, heavy machinery, and personal automobiles.²⁸ The equipment will be equipped with required emissions control equipment.²⁹ Construction activities, primarily vehicle travel over unpaved roads in the construction site, will produce fugitive dust.³⁰ The Project EPC contractor will develop a dust control plan identifying mitigation measures including the use of crushed gravel and dust suppression using water trucks. *Id.* Once constructed, the Project generating equipment will

²⁶ A copy of the CEA is included as **Exhibit 3** to this motion.

²⁷ CEA at 3.

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

produce no air emissions and the only emissions will be limited to emissions from worker vehicles, landscaping maintenance equipment, and Project maintenance.³¹

The CEA concluded:

Air quality impacts from construction activities will be temporary and will depend on both man-made factors (intensity of activity, control measures, etc.) and natural factors such as weather. However, even under adverse conditions, air emissions will have only a minor, short-lived impact on off-site air quality. Air quality impacts from the Project will be below the applicable ambient air quality standard. The effects to air quality from facility operations will be negligible. Overall, the potential impacts to air quality from construction-related activities and operation of the Project will be minimal. **The Project will not require an air quality permit.**³²

(b) *Water Evaluation (KRS 224.10-280(3)(b))*

KRS 224.10-280(3)(b) requires that the CEA for the Project describe the type and quantity of water pollutants that will be discharged to the waters of the Commonwealth and the methods that will be used to control those discharge. Site grading and construction activities represent the most likely sources of water pollution from the Project site. Prior to construction, the Project will obtain coverage under the Kentucky Pollutant Discharge Elimination System (“KPDES”) permit for Stormwater Discharges Associated with Construction Activities (“KYR10”).³³ The KYR10 permit requires the development and implementation of a stormwater pollution prevention plan (“SWPPP”) that will identify best management practices (“BMPs”) for use at the project during construction.³⁴ Once grading is complete, Fleming Solar will seed the disturbed areas with non-invasive species of groundcover for stabilization and erosion minimization.³⁵

During operations, the Project will store small quantities of petroleum fuels, lubricants, and groundskeeping chemicals for use in maintenance and repair of equipment.³⁶ These materials will

³¹ *Id.* at 4.

³² *Id.* (emphasis in original).

³³ *Id.* at 5.

³⁴ *Id.*

³⁵ *Id.*

³⁶ *Id.* at 6.

be stored in the operations and maintenance building and others structures and the Project will implement and maintain BMPs to minimize impacts of the operation of the Project on water quality.³⁷

The CEA determined:

The construction, operations, and maintenance of the Project facilities will have little impact on surface waters. Project development will commence according to approved site plans and permitted authorizations to ensure construction activities control onsite pollutants and avoid impacts to surface waters. BMPs will be employed to control potential sediment runoff and other potential surface water pollutants. The operation of the solar facility will likely have an indirect benefit to surrounding surface waters with the facility usage of native vegetation and the reduction in fertilizer and pesticide use.³⁸

(c) *Waste Evaluation (KRS 224.10-280(3)(c))*

KRS 224.10-280(3)(c) requires that the CEA for the Project describe the type and quantity of wastes that will be produced by the Project and how those wastes will be managed and disposed of. The Project will generate wastes during both construction and operation.³⁹ Waste materials will be handled and disposed of in accordance with local, state, and federal regulations.⁴⁰ Waste during construction activities will include construction debris and general trash, including wooden crates, pallets, cardboard boxes, plastic packaging, and excess electrical wiring.⁴¹ Waste during Project operations will be minimal and will result primarily from maintenance or repair of equipment.⁴² Project solar PV modules consist of silicone, aluminum, polymers, and copper materials which are inert materials not constituting hazardous materials or hazardous wastes.⁴³ There will be no liquid material in the solar PV modules that would pose a leak or contaminant

³⁷ *Id.*

³⁸ *Id.*

³⁹ *Id.* at 7.

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

threat.⁴⁴ The CEA determined, “[b]ased on a review of Project waste generation activities, no adverse impacts from waste are anticipated to occur as a result.”⁴⁵

(d) *Water Withdrawal Evaluation (KRS 224.10-280(3)(d))*

KRS 224.10-280(3)(d) requires that the CEA for the Project identify the source and volume of water withdrawal necessary for the construction and operation of the Project and methods to be used for managing such withdrawals. At this time, Fleming Solar does not anticipate requiring water withdrawals for Project construction or operation. If required during construction, Fleming Solar may utilize water trucks to provide supplementary water.⁴⁶ If a well is required during Project operations, the Project will obtain all necessary approvals and comply with the Safe Drinking Water Act if the water will be used for drinking.⁴⁷ Operation of the Project will not be water-intensive.⁴⁸ The CEA concludes that, if required, “Water withdrawal for the Project is not expected to create an adverse impact on regional water resources.”⁴⁹

2. KRS 278.010

KRS 278.010 is the definitions section that applies to KRS 278.010 to 278.450, 278.541 to 278.544, 278.546 to 278.5462, and 278.990. The Board’s authority begins with KRS 278.700 and extends through KRS 278.716 and any applicable provision of 278.990. Fleming Solar has met the goal of KRS 278.010 by filing a complete Application pursuant to the applicable statutes utilizing the definition of any applicable term defined in KRS 278.010.

⁴⁴ *Id.*

⁴⁵ *Id.* at 8.

⁴⁶ *Id.* at 8.

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *Id.* at 9.

3. KRS 278.212

KRS 278.212 requires the filing of plans and specifications for a merchant generator's electric interconnection with an electric utility prior to construction and requires that the merchant generator bear the costs associated with the upgrades and the utility's rate payers. Fleming Solar will comply with this requirement through its compliance with the PJM interconnection process. Additionally, Fleming Solar will be responsible for the appropriate costs resulting from interconnecting with the electric utility. The Fleming Solar Project meets the goals of KRS 278.212.

4. KRS 278.214

KRS 278.214 establishes a curtailment priority for utilities or cooperatives that provide transmission service to follow in the event an emergency on its transmission facilities require curtailment. To the extent they apply to the Project, Fleming Solar will comply with the requirements of KRS 278.214. Accordingly, the Fleming Solar Project meets the goals of KRS 278.214.

5. KRS 278.216

KRS 278.216 requires a utility to obtain a site compatibility certificate and complete a site assessment report prior to constructing an electric generating facility. The provisions in KRS 278.216 are similar to the requirements for obtaining a construction certificate under KRS KRS 278.700 to KRS 278.716. Fleming Solar is not a utility as defined in KRS 278.010(3), and, as such, KRS 278.216 does not apply. However, by submitting its application to the Board and complying with the similar requirements in KRS 278.700 to KRS 278.716, the Fleming Solar Project meets the goals of KRS 278.216.

6. KRS 278.218

KRS 278.218 requires Public Service Commission approval prior to the transfer of ownership or control of assets owned by a utility as defined in KRS 278.010(3). Fleming Solar is not a utility as defined in KRS 278.010(3) and, accordingly, KRS 278.218 does not apply. To the extent Board approval may at some time be required for Fleming Solar to transfer ownership or control of its assets, Fleming Solar will comply with the applicable statutory and regulatory requirements. The Fleming Solar Project meets the goals of KRS 278.218.

7. KRS 278-700 to KRS 278.716

KRS 278-700 to KRS 278.716 are the statutory provisions governing the application for and grant of construction certificates to merchant electric generating facilities. The Board has described the goals of these provisions as ensuring the proposed facility will be constructed and operated in a way that will not intrude upon or unnecessarily disrupt other surrounding land uses, including hospitals, nursing homes, residential areas, schools, parks or otherwise have adverse environmental impacts which are not otherwise regulated.⁵⁰ In addition, the Board has described these provisions as requiring an evaluation of:

- the economic impact of the proposed facility;
- whether the facility is to be located at a site where existing generating facilities are located;
- whether the facility will meet all applicable local planning and zoning requirements;
- whether the facility will adversely impact the reliability of electrical service for retail customers of utilities regulated by the Public Service Commission;
- the efficacy of any proposed mitigation measures; and
- the applicant's history of environmental compliance.⁵¹

Fleming Solar's application includes an evaluation of the issues required by KRS 278.700 to KRS 278.716. Moreover, Fleming Solar has designed the Project to ensure that, through project layout

⁵⁰ *ecoPower Order* at 39.

⁵¹ *Id.* (internal citations omitted).

and other mitigation measures, it will not intrude on or otherwise disrupt its neighboring landowners. The Fleming Solar Project meets the goals of KRS 278.700 to KRS 278.716.

IV. CONCLUSION

Fleming Solar has designed the Project to protect the residents of the adjoining residential neighborhood from the minimal impacts of the Project. Additionally, the Project meets the goals of the statutory provisions listed in KRS 278.704(4).

For these reasons, Fleming Solar respectfully requests that the Board grant the Fleming Solar Project a deviation from the 2,000 foot setback requirement in KRS 278.704(2) to allow it to place generating equipment within the Potential Project Footprint, no closer than 300 feet from the Property Boundary adjacent to the identified residential neighborhoods.

Respectfully submitted,

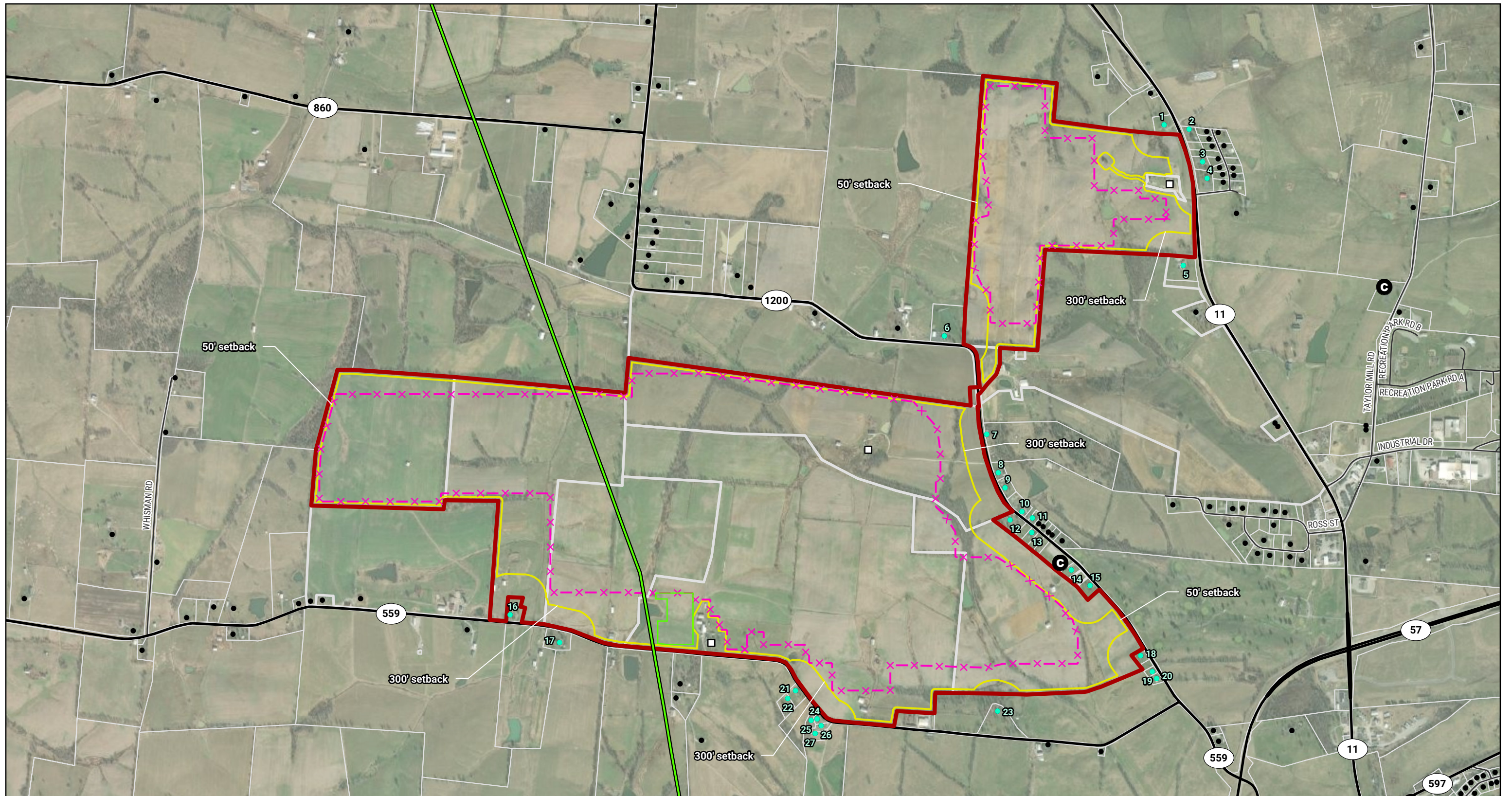


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Exhibit 1

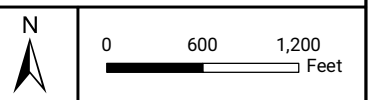
Project Boundary and Potential Project Footprint



LEGEND			
	Project Boundary (encloses ~830 acres)		Nearest Residential Structure (within 300 ft of Project Boundary)
	Security Fence (from Prelim. Site Layout dated 5/3/2021)		Residential Structure
	Utility Substation Security Fence		Residential Structure (participating)
	Potential Project Footprint (~725 acres, total)		Electric Transmission
			Church
			Land Parcel
			Land Parcel (participating)

Fleming Solar, LLC
Fleming Solar Project
 Potential Project Footprint
 and Nearest Residences

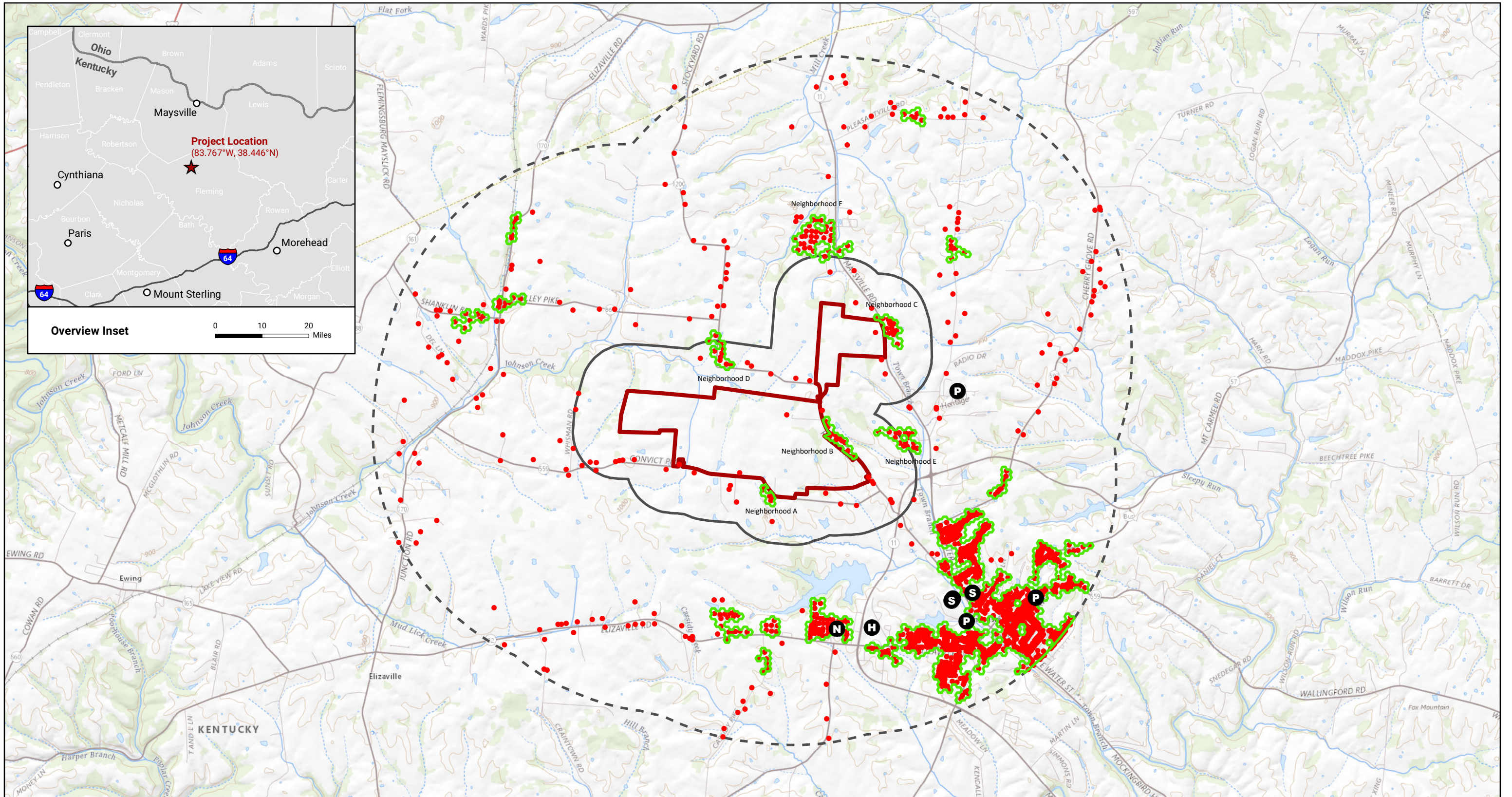
Project Location: Fleming County, Kentucky



Prepared by: J. Hobbs Date: 2021-05-12

Exhibit 2

Surrounding Residential Neighborhoods



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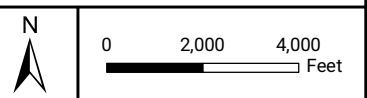
LEGEND

- Project Area
- Project Area Buffer (2,000 feet)
- Project Area Buffer (2 miles)
- Residential Structure
- Residential Neighborhood
- H Hospital
- N Nursing Home
- P Park
- S School

Fleming Solar, LLC
Fleming Solar Project

Surrounding
 Residential Neighborhoods

Project Location: Fleming County, Kentucky



Prepared by: J. Hobbs | Date: 2021-03-19

Exhibit 3

Cumulative Environmental Assessment



Cumulative Environmental Assessment
Fleming Solar Project
Fleming County, Kentucky

May 14, 2021

Prepared for:
Fleming Solar, LLC

Prepared by:
Energy Renewal Partners, LLC
1221 South MoPac Expressway, Suite 225
Austin, Texas 78746



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Figure 1 Regional Topography

INTRODUCTION

Kentucky Revised Statute (KRS) 224.10-280 requires that prior to construction of a facility to be used for the generation of electricity, the developer must submit a cumulative environmental assessment (CEA) to the Kentucky Energy and Environment Cabinet (the “Cabinet”). The CEA must provide a description of the proposed facility and information regarding air pollutants, water pollutants, waste generated, and water withdrawal needs associated with the facility.

PROJECT INFORMATION

The Fleming Solar Project (the “Project”) is a proposed 80-megawatt alternating current (“MWac”) photovoltaic (“PV”) electric generating facility. The Project consists of approximately 830 acres in unincorporated Fleming County, Kentucky, located less than one (1) mile northwest of the city of Flemingsburg (the “Site”). The proposed electric generation facility will utilize PV solar panels and associated racking, inverters, and a project substation transformer for its operation, which will connect to the Flemingsburg-Spurlock 138kV line transmission line located onsite.

Environmental reporting completed to date on the Project site:

- Phase I Environmental Site Assessment, October 2019.
- Phase I Environmental Site Assessment, March 2020 (updated boundary).
- Environmental Constraints Analysis and Permitting Review, November 2020.
- Phase I Environmental Site Assessment, April 2021 (updated boundary).
- Jurisdictional Waters of the U.S. Delineation, April 2021.
- Protected Species Habitat Assessment, April 2021.

The Project will consist of a construction phase lasting approximately 12-15 months. Temporary stabilized construction entrances will be installed at the Site access points to provide a stable entrance for construction traffic. During construction, both equipment vehicles and contractor/subcontractor labor vehicles will travel to, within, and from the solar facility. Typical equipment used in construction of a solar facility includes scrapers, bulldozers, dump trucks, watering trucks, graders, compactors, pile drivers, and backhoes. Construction activity should be relatively consistent during construction season, weather permitting, with tapering activity levels during the beginning and ending phases of construction and testing.

Following Site preparation, the facility equipment will be delivered onsite and staged at the various installation areas. Deliveries will include piles, racking, modules, inverters, electrical components, and switchyard equipment. The solar arrays, inverters, security fencing, and collection and distribution systems will be installed alongside internal access roads, typically in blocks. During trench excavation, topsoil and subsoil will be removed separately and backfilled appropriately after underground cables are installed.

Upon completion of the construction term, all construction equipment will be removed from the facility. Temporarily stabilized surfaces will be planted with permanent ground cover seed mixes. The solar facility will undergo final testing and commissioning before going online.

All necessary air, water, and waste permits and authorizations will be obtained before construction and operation of the Project. The following is a list of potential permit authorizations anticipated to be

received during Project development. However, the final Project design and EPC selection can affect what will ultimately be required and determine that not all of the listed permits will be necessary.

Permit	Regulatory Authority	Activity	Regulatory Citation
Spill Protection and Control, and Countermeasure (SPCC) Plan	U.S. Environmental Protection Agency (EPA)	SPCC required for total capacity of (Aboveground Storage Tanks) ASTs and oil filled equipment greater than 1,320 gal and with a reasonable likelihood of impacting water bodies. Likely not needed until construction.	40 CFR 112
Kentucky Pollutant Discharge Elimination System (KPDES) Construction Storm Water General Permit	KDEP	Construction sites that will disturb one acre or more of land must prepare a Storm Water Pollution Prevention Plan (SWPPP) and submit a Notice of Intent to the KDEP Division of Water (DOW).	401 Kentucky Administrative Regulation (KAR) 5:055
USACE Permit (Section 10 and/or Nationwide or Individual)	U.S. Army Corps of Engineers (USACE)	Structures in Navigable Waters/Work Affecting the Course, Location, Condition, or Physical Capacities of Navigable Waters requires Section 10 Permit. Impacts to jurisdictional waters will require a Clean Water Act (CWA) Section 404 permit, which could include a Nationwide Permit (NWP) or Individual Permit (IP).	33 U.S. Code (U.S.C.) §403 33 U.S.C. §§404 (404 permit)
401 Water Quality Certification (WQC)	KDEP	KDEP must certify all Nationwide and Individual Permits. If jurisdictional features are to be impacted by Project, 401 WQC will be required.	33 U.S.C. §§401
Safe Drinking Water Act (SDWA)	EPA	Compliance with the SDWA is required for facilities where drinking water is obtained through an onsite well, or where it is obtained from a municipal source but is further treated before being provided to workers. Compliance consists of monitoring, recordkeeping, reporting, and certain equipment and maintenance requirements.	42 U.S.C. §§ 300, 40 CFR Parts 142-143 (SDWA)

Air Pollutants

The EPA regulates the emission of air pollutants and, through its implementing regulations, establishes National Ambient Air Quality Standards (NAAQS) for several “criteria” pollutants that are designed to

protect the public health and welfare with an ample margin of safety through the Clean Air Act (CAA) 42 U.S.C. §7401 et seq. The regulated criteria pollutants are ozone, particulate matter (PM), carbon monoxide (CO), nitrous oxides (NO_x), sulfur dioxide (SO₂), and lead. Specified geographic areas are designated as attainment, nonattainment, or unclassifiable for specific NAAQS. Fleming County and the surrounding counties of Mason, Lewis, Rowan, Bath, Nicholas, and Robertson are designated as attainment as regulated by KAR for air quality established in 401 KAR Chapters 50-53, 55, 57-61, 63, 65, and 68.

The Project will generate temporary air pollutant emissions during construction activities. During the construction phase, air quality impacts will primarily result from the staging of equipment and supplies and the operation of vehicles, heavy machinery, and worker personnel vehicles. This equipment will all be equipped with required emissions control equipment. Daily worker traffic during construction will vary depending on the specific construction activities during the construction schedule. It is estimated that the work force will comprise up to 250 workers onsite during peak construction. Construction equipment will include, but not be limited to, graders, bulldozers, backhoes, flatbed semi-trucks, forklifts, concrete trucks, and bobcats and/or specialized tractors with extender or drill with auger or pile driver for installation of solar panel array posts. Tree and vegetative clearing will be limited to early in construction since much of the Site is pasture, hayfields, and cultivated crops. If tree or vegetative debris burning will occur, those activities will be carried out in accordance with Kentucky's Open Burning regulations (401 KAR 63:005) and applicable local regulations. Otherwise, vegetated debris will be chipped, ground, and composted onsite or removed offsite to a permitted facility.

Vehicles and construction equipment traveling over unpaved roads and the construction site will result in the emission of fugitive dust. Impacts are anticipated to be minor in nature due to the large size of the site and the low-density of housing and rural character of the area, though reasonably available control measures will be used to mitigate fugitive dust emissions. Measures will include using compacted gravel at all site driveway entrances and at the laydown yard. Internal roadways will either have compacted gravel or be watered periodically for dust suppression using water trucks.

The Engineering, Procurement and Construction (EPC) contractor will be responsible for developing and implementing a dust control plan, which will include the following best practices:

- The contractor will identify and monitor each day's expected weather conditions, including precipitation and wind speed and direction, to anticipate what dust control measures will be needed. Disturbance areas will be minimized to the maximum extent feasible. Open piles will be covered.
- The contractor will construct and upgrade internal roads and driveways with compacted gravel as needed. Vehicles will be required to travel slowly along site roads (typically 10 miles per hour). Speed limits will be posted and enforced. Construction vehicles such as open bodied trucks will be covered while in motion, and soil loads shall be kept below the freeboard of the trucks. Water will be applied as needed in accordance with industry best practices to control dust along site roadways and to clean equipment and vehicles when needed. Under the KY Pollutant Discharge Elimination System, water used for dust control during Project construction is authorized as a non-stormwater discharge activity.

Air quality impacts from construction activities will be temporary and will depend on both man-made factors (intensity of activity, control measures, etc.) and natural factors such as weather. However, even under adverse conditions, air emissions will have only a minor, short-lived impact on off-site air quality. Air quality impacts from the Project will be below the applicable ambient air quality standard. The effects to air quality from facility operations will be negligible. Overall, the potential impacts to air quality from construction-related activities and operation of the Project will be minimal. **The Project will not require an air quality permit.**

During Project operation, the solar generating equipment produces zero air emissions and therefore, the solar facility is not expected to emit any of the following criteria pollutants: PM, CO, SO₂, NO_x, VOCs, or lead. Similarly, the facility is also not expected to emit Hazardous Air Pollutants (HAPs).

Project support equipment used during the operations of the Project will be limited to worker vehicles, equipment used for routine landscape maintenance, and equipment for maintenance of the solar and electric facilities. Project operation will include several full-time employees (approximately 20 daily trips), who will perform facility inspections and maintain onsite equipment. Vegetation will be maintained to control growth and prevent overshadowing or shading of the PV panels. Combustion of gasoline and diesel fuels by internal combustion engines will generate local emissions of PM, NO_x, CO, volatile organic compounds (VOCs), and SO₂. These vehicles and equipment are equipped with pollution emission controls and catalytic converters to limit or control harmful emissions. Construction and operation phase vehicles and equipment will be expected to result in minor impacts to air quality, due to onboard pollution controls and the limited fleet size and hours each piece of equipment will operate over the Project construction and operations phases.

Once the Project is operational, the 20 daily employee trips will generally occur along the compacted, gravel-surfaced Main Entrance to the O&M Building, so long-term fugitive dust impacts are not anticipated.

Water Pollutants

Surface Water

The Site drains into three (3) distinct watersheds. The northern most portion of the Site drains north and is located within the Mill Creek-North Fork Licking River watershed (12-digit hydrologic unit code (HUC) #051001011003). The eastern and southeastern portions of the Site drain southeast and are located within the Allison Creek-Fleming Creek watershed (HUC #051001010903). The central, western, northwestern, and southwestern portions of the Site drain north to northwest and are located within the Upper Johnson Creek watershed (HUC #051001011103). Onsite waters are not identified as having special-use designations such as Cold Water Aquatic Habitat (CAH) or Outstanding State Resource Water (OSRW) as regulated in 401 KAR 10:026, 401 KAR 10:30, and 401 KAR 10:031. No public permitted water withdrawal points or wells are within the Site.

The eastern 178-acre portion of the Project boundary is located within the Kentucky Department of Water – Watershed Planning Area of Town Branch. The Stockton Creek Watershed Plan was written by Kentucky Waterways Alliance to describe this Watershed Planning Area, funded in part by a grant from the US EPA. The Stockton Creek Watershed Plan focuses on identifying point and nonpoint pollution sources in the

watershed, quantifying the pollution coming from each source, and making recommendations for Best Management Practices (BMPs) to improve and protect water quality in Stockton Creek. There are currently no special land use planning ordinances or guidelines in effect.

The western 652-acre portion of the Project boundary is located within a Zone III - Source Water Protection Area. This protection area generally follows Helena Road and Convict Pike west from the Town Branch Watershed Planning Area western boundary and extends westward through the Project area and outwards towards Licking River. Source Water Protection Areas are divided into three (3) zones based on distance from the drinking water intake. Zone III extends to 25 miles above the intake or to the hydrologic boundary. The federal Safe Drinking Water Act provides the guidance and framework for this program. This voluntary approach is encouraged because protection of source water requires attention to land use activities to control non-point sources of pollution. The Kentucky Source Water Protection program requires water suppliers to delineate watersheds contributing to their water sources, determine the susceptibility to contamination, develop strategies to manage potential contaminants, and plan for future land use. All 120 counties in Kentucky were required to assess their water availability and security and plan for the next 20 years. Many of the counties did this planning in conjunction with their local Area Development Districts.

Prior to construction, the Project will obtain coverage under the Kentucky Pollutant Discharge Elimination System ("KPDES") permit for Stormwater Discharges Associated with Construction Activities ("KYR10"). As required by the KYR10 permit, a stormwater pollution prevention plan ("SWPPP") will be prepared by the EPC Contractor and implemented to minimize impacts associated with the construction activities. The SWPPP will identify BMPs for use at the Project site including silt fences, onsite temporary sediment basins, sediment traps, and/or buffers on jurisdictional streams and wetlands. The BMPs will minimize sediment from entering waters as well as sediment migration off-site. The Project will work with the existing landscape (e.g., slope, drainage, utilization of existing roads) where feasible and minimize grading. Generally, farmland requires minimal grading for construction.

Following any grading, all areas will be seeded with non-invasive species of groundcover for stabilization and erosion minimization. Erosion control measures will be inspected and maintained until vegetation has returned to the pre-construction conditions or the Site is stabilized. When construction is completed, the Project will provide a NOT upon site stabilization. Water withdrawn off-site will be used for dust control during construction.

It is estimated that, during Project construction, approximately 6-7 acres will be used as staging areas for personnel, equipment, and materials. Following Project construction, disturbed areas will be seeded with both temporary and permanent seeding mixes. However, a portion of this area could remain unvegetated as an operational use area for the life of the Project depending on final site plan and layout.

Project design may result in either or both temporary and permanent impacts to surface waters as a result from trenching of utility lines, temporary construction access roads or fill placement, and permanent road crossings and placement of culverts in streams. These activities will be avoided to the maximum extent practicable by utilizing the Waters of the U.S. delineation data and U.S. Army Corps of Engineers verified jurisdictional determination. When impacts to surface waters cannot be avoided, Section 404/401 Clean

Water Act permitting will be pursued. Conditions under the authorized Nationwide Permit, Section 404/401 program will be adhered to during Project development. These permit conditions will ensure that sediment pollution is minimized and all activities in Waters of the U.S. will be minimized.

During Project operations the facility will include the general maintenance and repairs of onsite equipment. Onsite storage of chemicals will consist of small quantities of petroleum fuels, lubricants, and fluids as well as groundskeeping chemicals. Permanent operations and maintenance buildings and structures will be employed for use as part of the general maintenance of petroleum-based equipment. BMP's will be installed and maintained to minimize any associated impacts on surface water as a result of the full-time operational facilities.

The construction, operations, and maintenance of the Project facilities will have little impact on surface waters. Project development will commence according to approved site plans and permitted authorizations to ensure construction activities control onsite pollutants and avoid impacts to surface waters. BMPs will be employed to control potential sediment runoff and other potential surface water pollutants. The operation of the solar facility will likely have an indirect benefit to surrounding surface waters with the facility usage of native vegetation and the reduction in fertilizer and pesticide use.

Groundwater

Groundwater is precipitation that has drained through the soil into the gravels and bedrock fractures and faults below the surface. In Fleming County, most groundwater used for domestic supply comes from relatively shallow aquifers, less than 150-feet in depth (Kentucky Geological Survey County Groundwater Resource Reports). In general, movement of shallow unconfined groundwater is controlled largely by topographic gradients. As such, if shallow groundwater is present onsite, it is anticipated to follow onsite crevations and flow to the north on the western portion of the Site and to the southeast on the eastern portion of the Site.

Analysis of the Kentucky Geological Survey Water Well and Spring Interactive Map identified one (1) public water well and one (1) surface water source within three (3) miles of the Site. Analysis found that there are no public wells or drinking water sources mapped onsite.

Project construction will include petroleum products including fuels, lubricants, and hydraulic fluids that will be present onsite. As a result, there will be potential for small onsite spills during construction activities. However, construction BMP's and implementation of a SPCC plan will control leaks and spills to minimize the potential for adverse impacts to groundwater. During Project operations, any petroleum-based products will be stored within onsite buildings. Bulk quantities of petroleum-based products, such as fuels, will be stored in appropriate tanks with secondary spill containment systems. Equipment will be maintained in good working order to avoid leaks and minimize the risk of spills. BMPs will be utilized to clean up leaks and spills. Health and safety protocols will be adhered to as part of the Project operations to protect workers safety and to avoid direct adverse impacts to groundwater.

Construction contractors will be responsible for preventing spills by implementing proper storage and handling procedures. Special procedures will be identified to minimize the potential for fuel spills, and

spill control kits will be carried on all refueling vehicles for activities such as refueling, vehicle or equipment maintenance procedures, waste removal, and tank clean-out.

Operations of the Project solar facilities will not adversely impact groundwater. The solar PV panels will not negatively impact rainwater infiltration and groundwater recharge. Generally, studies have demonstrated that solar farms improve site pervious characteristics and reduce offsite runoff. Project vegetation management will promote upkeep of planted and seeded areas on the Site, ensuring successful plant health and conditions, which will act to reduce rainwater runoff and promote onsite infiltration and groundwater recharge. Fertilizers and herbicides will be used sparingly and in accordance with manufacturer's recommendations to avoid contamination of groundwater. Additionally, beneficial indirect impacts to groundwater could result from the change in land use from agricultural uses due to reduction in fertilizer and herbicide use.

No direct adverse impacts to groundwater are anticipated to occur as a result of the Project due to the use of a SPCC plan; there will be minor beneficial indirect impacts to groundwater due to the reduction in fertilizer and herbicide use as land use changes from agriculture to solar energy generation. Given the minimal chemical use and implemented BMPs, it is unlikely that the Project will negatively impact any water resources in the area during the construction and operations phases.

Wastes

Wastes will be generated as a result of the construction and operation of the solar facility. However, waste materials will be handled and disposed of in accordance with local, state, and federal regulations. Construction activities will generate solid waste consisting of construction debris and general trash, including wooden crates, pallets, cardboard boxes, plastic packaging, and excess electrical wiring. Project utilized solar PV modules consist of silicone, aluminum, polymers, and copper materials. These materials are inert and do not constitute a hazardous material or hazardous waste. There will be no liquid material in the solar PV modules that would pose a leak or contaminant threat.

Construction and operation generated wastes will be disposed off-site at a permitted facility to be determined by the designated contractor(s), and materials capable of being recycled will be removed from the Site and recycled at an appropriately licensed facility. As a result, no waste materials will be disposed of on the Site.

Construction personnel will be responsible for inspection, cleanup, and proper labeling, storage, and disposal of all wastes and debris. Disposal containers such as dumpsters or roll-off containers will be obtained from a reputable waste disposal contractor and will be located within onsite staging areas or other designated areas, as determined by the site plan. Portable chemical toilets will be provided for workers during Project construction. Sewage will be pumped out by a licensed contractor and the sewage waste will be disposed at the Flemingsburg Wastewater Treatment Plant or other appropriate facility.

Waste generation during the Project operations will be minimal and will mainly result from the maintenance and/or replacement of worn or broken equipment and defective or broken electrical materials. This waste and debris will be processed for transportation and delivered to an appropriately licensed disposal facility or recycling center. All Project generated wastes during operation will be

managed by the designated waste management company and disposed of in accordance with applicable federal and state requirements to minimize health and safety effects. Due to the size of the Project facility, no permanent bathroom facilities are anticipated other than those included within the planned O&M building. Portable chemical toilets will be provided for personnel during Project operations. Sewage will be pumped out by a licensed contractor and the sewage waste will be disposed at the Flemingsburg Wastewater Treatment Plant or other appropriate facility.

To ensure the health and safety of workers and the environment, following the operation term and during the decommissioning process, Project components will be removed from the Site and recycled or disposed of at an appropriately licensed disposal facility. Below ground portions of the PV module supports shall be removed entirely where practical. Those supports that are more firmly anchored (e.g., such as embedded in bedrock) may be cut off at least 6 feet below ground or to the depth of bedrock, and the remaining support left in place. This depth would avoid impact of underground equipment on future farming or other construction activities. The demolition debris and removed equipment may be cut or dismantled into pieces that can be safely lifted or carried with the onsite equipment being used. The debris and equipment will be processed for transportation and delivered to an appropriately licensed disposal facility or recycling center. No hazardous materials or waste will be used during operation of the solar facility, and disposal of hazardous material or waste will not be required during decommission.

Based on a review of Project waste generation activities, no adverse impacts from waste are anticipated to occur as a result.

Water Withdrawal

During Project construction, water trucks may be utilized to supplement water usage by transporting water from off-site facilities. Potable water will be transported onsite during construction and stored at construction trailers and staging areas for workers and personnel consumption. Construction related water usage would support site preparation and grading activities, such as dust control and earth compaction. Other water usage during construction will include building foundations and equipment pads, equipment washing, and other minor uses. Equipment washing and any potential dust control discharges will be handled in accordance with BMPs described in the SWPPP for water-only cleaning.

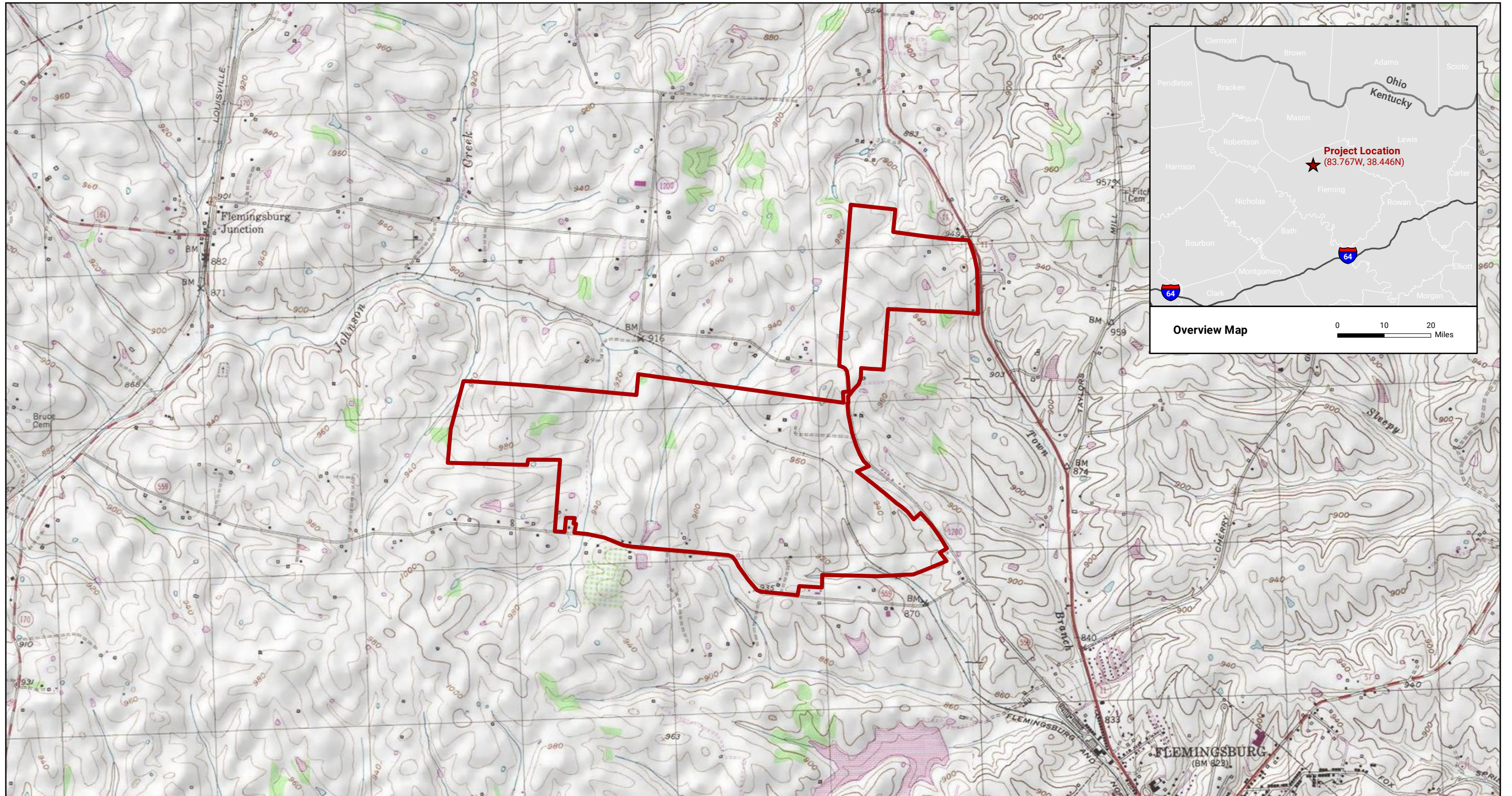
The Project may require installation of a permanent water well to provide water for the O&M building. If required, the Project will obtain all necessary approval and compliance with the SDWA will be adhered to where drinking water is obtained through an onsite well. Compliance will consist of monitoring, recordkeeping, reporting, and certain equipment and maintenance requirements. Based on the Kentucky Geological Survey, aquifers in Fleming County have sufficient permeability to conduct groundwater and to allow for domestic usage through use of man-made water wells. Project underlying geology includes the Upper Ordovician formation, which can yield 100 to 500 gallons per day to wells drilled in valley bottoms and hillsides.

Operation of Project facilities will not be water intensive. Precipitation in the region is adequate to remove dust from the PV panels, maintaining energy production; therefore, manual panel washing with water will not constitute a significant water withdrawal. Water will be used for ongoing vegetation management needs, including vegetation installation and during periods of drought.



Water withdrawal for the Project is not expected to create an adverse impact on regional water resources.


Figure 1
Regional Topography



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LEGEND

 Project Area (~830 acres)

Fleming Solar, LLC
Fleming Solar Project

Regional Topography
 Elizaville and Flemingsburg
 USGS 1:24,000 Topographic Quadrangles

Project Location: Fleming County, Kentucky

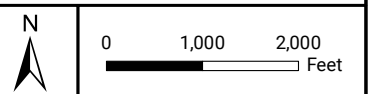


FIGURE 1

Prepared by: L. Kauffman Date: 2021-05-13