

COMMONWEALTH OF KENTUCKY

BEFORE THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION
AND TRANSMISSION SITING

In the Matter of:

ELECTRONIC APPLICATION OF AEUG)	
FLEMING SOLAR, LLC FOR A CERTIFICATE)	
OF CONSTRUCTION FOR AN)	
APPROXIMATELY 188 MEGAWATT)	CASE NO.
MERCHANT ELECTRIC SOLAR)	2020-00206
GENERATING FACILITY IN FLEMING)	
COUNTY, KENTUCKY PURSUANT TO)	
KRS 278.700 AND 807 KAR 5:110)	

SITING BOARD STAFF'S SECOND REQUEST FOR INFORMATION
TO AEUG FLEMING SOLAR, LLC

AEUG Fleming Solar, LLC (AEUG Fleming), pursuant to 807 KAR 5:001, is to file with the Siting Board an electronic version of the following information. The information requested herein is due on February 19, 2021. The Siting Board directs AEUG Fleming to the March 16, 2020 and March 24, 2020 Orders in Case No. 2020-00085¹ regarding filings with the Siting Board. The Siting Board expects the original documents to be filed with the Commission within 30 days of the lifting of the current state of emergency. All responses in paper medium shall be appropriately bound, tabbed, and indexed. Electronic documents shall be in portable document format (PDF), shall be searchable, and shall be appropriately bookmarked.

¹ Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (Ky. PSC Mar. 16, 2020), Order at 5–6. Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (Ky. PSC Mar. 24, 2020), Order at 1–3.

Each response shall include the name of the witness responsible for responding to the questions related to the information provided. Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association or a governmental agency, be accompanied by a signed certification of the preparer or the person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

AEUG Fleming shall make timely amendment to any prior response if AEUG Fleming obtains information that indicates the response was incorrect when made or, though correct when made, is now incorrect in any material respect. For any request to which AEUG Fleming fails or refuses to furnish all or part of the requested information, AEUG Fleming shall provide a written explanation of the specific grounds for its failure to completely and precisely respond.

Careful attention shall be given to copied material to ensure that it is legible. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request. When filing a paper containing personal information, AEUG Fleming shall, in accordance with 807 KAR 5:001, Section 4(10), encrypt or redact the paper so that personal information cannot be read.

1. Refer to AEUG Fleming's response to Siting Board Staff's First Request for Information (Staff's First Request), Item 2.b. Provide a copy of the Social Impact Management program that is specifically designed for the proposed solar project.

2. Refer to AEUG Fleming's response to Staff's First Request, Item 2.d. regarding the question and answer to the issue of noise impacts from solar facilities. The answer states that the hum from the motors in the trackers is not audible "off site," especially "with plantings." Confirm that this answer indicates that noise impacts can be mitigated by vegetative buffering.

3. Refer to AEUG Fleming's response to Staff's First Request, Item 2.e.

a. Regarding the use of sheep grazing as vegetation management, provide the status of AEUG Fleming's determination on vegetation management practices and whether sheep grazing will be used as part of that process.

b. Regarding the concerns expressed by some residents over wetlands impact, state how the proposed solar is designed to avoid such impacts.

c. Regarding the discussion with the one landowner after the meeting about vegetative screening for that landowner's property, provide an update on the status of how AEUG Fleming is addressing this landowner's concern.

4. Refer to AEUG Fleming's response to Staff's First Request, Item 3.a. The response is not responsive to the question posed. With respect to the Visual Simulation 2 – Old Convict Road and 3 – Flemingsburg Baptist Church, state whether any measures can be implemented at these two locations to mitigate any visual impacts caused by the proposed solar facility. If no measures can be implemented to reduce visual impacts, fully explain why.

5. Refer to AEUG Fleming's response to Staff's First Request, Item 3.b. To the extent not identified in the Visual Assessment, state whether AEUG Fleming has evaluated all areas adjacent to the propose solar facility site where there are currently no

visual buffer to determine the visual impact caused by the solar facility and whether any mitigation measures can be implemented to reduce such visual impacts.

6. Refer to AEUG Fleming's response to Staff's First Request, Item 4, regarding a no glare study being performed for the proposed solar facility.

a. For other ACCIONA solar projects, state whether a glare study was only performed where the solar site is located near an airport or adjacent to a major interstate or highway.

b. State whether it is industry standard to conduct a glare study only where a solar facility is located near an airport or adjacent to a major interstate or highway.

c. State whether AEUG Fleming will be monitoring glare impacts once the solar facility is in operation and that it will make adjustments to the resting angles of the solar trackers during the early morning and early evening hours.

7. Refer to AEUG Fleming's response to Staff's First Request, Item 5. State whether AEUG Fleming has identified any nearby properties that will need to have screening measures other than fencing to mitigate visual impacts and identify what those screening measures will be.

8. Refer to AEUG Fleming's response to Staff's First Request, Item 26.b. As part of the supplemental response to the Flemingsburg Water SWAPP Plan, which is yet to be filed, in addition to identifying whether the solar panels conform to the SWAPP Plan, but also the proposed substation, Operations & Maintenance building, and the well to provide water to the site.

9. Refer to AEUG Fleming's response to Staff's First Request, Item 26.d. Confirm that the percentage of SWAPP Zone 1 that is in the Project Area for Flemingsburg

Water is $(241.8 \text{ acres} / 556.7 \text{ acres}) \times 100 = 43.4$ percent and that the percentage of SWAPP Zone 3 that is in the Project Area for Cynthiana Municipal Water Works is $(1,460 \text{ acres} / 110,697 \text{ acres}) \times 100 = 1.3$ percent.

10. Refer to the questions propounded by Harvey Economics Consulting, which are attached as an Appendix to this information request, and provide responses to those questions.



Linda C. Bridwell, PE
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of the Kentucky State Board on
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DATED FEB 03 2021

cc: Parties of Record

APPENDIX

APPENDIX TO A REQUEST FOR INFORMATION OF THE KENTUCKY STATE
BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING IN CASE
NO. 2020-00206 DATED FEB 03 2021

[NINE PAGES TO FOLLOW

**SECOND SET OF INQUIRIES ABOUT THE AEUG FLEMING SOLAR, LLC
APPLICATION FOR A CONSTRUCTION CERTIFICATE**

This second set of questions pursuant to our review of the Site Assessment Report (SAR) for the AEUG Fleming Solar facility has been prepared as a follow-up to the responses provided by AEUG Fleming Solar, LLC to the initial set of questions submitted on January 8, 2021 (RFI#1) and received on January 22, 2021. HE requests that responses to these questions be provided in writing, supplemented by attachments as needed. HE will clarify any questions which are unclear to the Applicant. HE will review the Applicant responses and seek a follow-up discussion confirming our understanding with the appropriate AEUG Fleming Solar personnel as needed.

I Construction phase activities

- A. According to the response to Question IA, AEUG states that the construction period is expected to last 62 weeks (about 15 months), instead of the 11 months previously stated (Section 3.2 “Construction Traffic” in the “Noise and Traffic Study”). Please confirm this change from 11 months to 15 months.
1. In what month is construction expected to commence and end?
 2. HE understands (via the Applicant’s response to V-A-7) that construction crews will normally work within daylight hours. Work performed during the day will cause different noise and traffic effects than if the work was performed after normal work hours. How often should HE assume construction will occur after 7pm?
 - a. How will construction be affected if work ceased at 7pm each day?
 3. During summer months, when sunlight can exist until almost 10pm, is the Applicant expecting construction activities to last until sundown?
- B. We understand the Construction Schedule to mean that the numbers in the week columns represent the count of laborers expected to be on site in that week. For example, “Civil Works” week #10 has a “3” – does this mean a total of three laborers will be on site? And in week #16, a total of 11 laborers will be on site? These estimates appear to be a much smaller construction workforce than indicated in the Economic Impact Report. Please explain or resolve this discrepancy.
1. Please provide a table showing the average number of construction workers by quarter over the construction period, including the workers required to construct the Point of Interconnection.

2. Please provide a table showing the peak number of construction workers by quarter over the construction period, including the workers required to construct the Point of Interconnection.
 - a. How long is the peak construction period expected to last?
3. Please provide a table showing the peak number of construction-related vehicles by quarter over the construction period, including the vehicles required for construction of the Point of Interconnection.
4. In the Construction Schedule, what does the “235” represent under the “Week #” column heading?
 - a. What does the “235” represent under the “MWp” column heading?
 - i. What does “MWp” represent?
- C. In what month will construction for the Point of Interconnection commence?
- D. Will construction of the Project be sequential by parcel or simultaneous construction activity, i.e. drive the piles and install the panels throughout before moving to next activity?
 1. Will the contiguous parcel be completed first, and then all construction activities will commence on the noncontiguous (western) parcel?
- E. If vegetative buffering were needed, could that be phased in when the construction fence was installed?

II Site development plan

- A. The updated Preliminary Site Plan map (identified as Exhibit A in the response to RFI#1) does not include the locations of the three staging areas described in the response to HE’s Question II-4-a. Please provide an updated map showing the locations of the three staging areas.
 1. Will the three staging areas have security fencing during construction?
 2. Please also identify internal roads to be constructed within the Project boundary and the substation, O&M facility and warehouse buildings on the updated map.
- B. The updated Preliminary Site Plan map identifies an additional access point/ road in the southeast portion of the Project that was not included in the original Site Layout graphic of the SAR. Please confirm that there are now 10 different access points/ roads going into and out of the Project boundary.

- C. How many feet or miles of new gravel access roads will be created, including access roads entering the Project Area from public streets and roads constructed within the project boundaries? This data was not included in AEUG’s responses to RFI #1.
- D. Please confirm that the total acreage within the Project boundary is 1,857 acres (stated in AEUG’s response to Question 18 in the Siting Board’s RFI #1).
 - 1. Please confirm that the 1,590 acres described in Section 1 of Volume 1 of the Application is the estimated acreage that will be covered by project components (i.e., solar panels, inverters, buildings).
- E. The Project Parcel and Project Tract maps provided in response to question II-E are helpful. What is the difference between those two maps, other than the Project Parcel map labeling parcel numbers and owner names?
- F. Please confirm that the legal description of the “site”, as included in Appendix B, describes the legal boundaries of the participating properties, which, according to the Project Parcels map included in the response to RFI #1, appears to cover a larger area than the Project boundary.
 - 1. If that is true, how many acres of land are included in the legal description (Appendix B)?

III Setback Deviation Request

- A. HE has no follow-up questions related to the setback deviation request. We understand that AEUG plans on filing a Motion for Deviation “in the next ten days or so”. Unless that Motion is filed and provided to HE for review when these responses are submitted, HE may not be able to finalize a recommendation regarding this request as part of the SAR review report to the PSC.

IV Property values and land use

- A. Kirkland Report- Please confirm that although 76 properties are listed as “Adjoining Properties” in the original report (pages 4-7), five of those properties are not truly adjoining, but are simply “in proximity” to the project, as described in the Kirkland response to questions in Section IV in RFI #1.
 - 1. If yes, why are the five properties that do not have any adjoining linear feet included as “adjoining properties” in the report?
- B. What is the distance, in feet, between the warehouse building located on the commercial parcel owned by Story Properties, LLC and the nearest solar panel?

V Traffic

A. Table 3.2-1 of the “Noise and Traffic Study” contains the average and peak number of vehicles expected to visit the Project site during the construction stage. HE is seeking information about the weights of these vehicles.

1. Based on the Applicant’s responses in V-A-5 and comparing those to Table 3.2-1, HE assumes the following:

a. “Employee Passenger Vehicles” (40 average and 90 peak per day) are 4,500 – 8,000 pounds.

i. The count of vehicles seems to be inconsistent with the Economic Impact Study and the peak construction time in the Construction Schedule. The assumption of 3.4 – 7.6 workers per car (302 FTEs / 90 & 40 vehicles) is atypically high of construction projects. Will the Applicant be organizing a carpool program to reduce the number of vehicles travelling to the site? Or please confirm that the number of construction worker vehicles be in the range of 1.0 to 1.5 workers per vehicle on site each day, which might be typical.

ii. Will the Applicant shuttle in employees from locations off-site via buses?

iii. Per the Applicant’s response to II-D-2, should these vehicle estimates be increased by 20 for an average day and 30 for a peak day, to account for the Point of Interconnection employees?

b. “Heavy-Duty Delivery Trucks” (8 average and 16 peak per day) are at most 80,000 pounds. HE assumes these trucks will bring heavy construction equipment, solar panels, tracking motors, etc, but the Applicant’s response in V-A-5 indicates trucks containing these loads will only travel to the site once every two weeks. Please resolve this frequency.

c. “Light-Duty Delivery Trucks” (2 average and 5 peak per day) are roughly 23,000 pounds. The Applicant’s response in V-A-5 indicates FedEx/ UPS trucks containing small tools and parts, etc. will visit the site 1-2 times per week.

i. Are HE’s assumptions correct? If not, please provide the corresponding weights (including loads) for “Heavy-Duty Delivery Trucks” and “Light-Duty Delivery Trucks” and confirm the estimated number of trips to the site per day during average and peak times during construction.

2. Please confirm the heaviest vehicle is 554,000 pounds or 277 tons, which is nearly seven times heavier than the gross vehicle weight limit for roads surrounding the Project (40 tons).
 - a. What is the predicted route for this vehicle, and which access point will this vehicle utilize?
 3. The Applicant's response (V-A-5) says that "infrequent activity" will include replacement transformers and a truck crane. Will the trips bringing in the transformers and truck crane be transported in one load? Thus, will the combined vehicle weight total 95,000 pounds (25k + 35k + 35k = 95k pounds)?
 4. The Applicant's response (V-B-1) says trips with loads of up to 80,000 pounds will occur every two weeks over the life of the Project. Is this correct?
- B. Will AEUG agree to repair or compensate private parties or local or State government agencies for damage to the roadways each is responsible for?

VI Dust

- A. HE has no follow-up questions related to dust.

VII Noise

- A. Section 2.3.2 of the "Noise and Traffic Study" indicates 73 inverters will be used throughout the Project. The Applicant's response in II-A-6-b indicates 70 inverters. Please confirm the reduction of 73 inverters to 70.
- B. HE understands the pile installation can take up to 40 weeks. Please confirm that this falls under "Foundations / Poles" in the Construction Schedule, or otherwise state which activity it falls under?
- C. In the Applicant's VII-B-1 response, is "105,300 modules" a typo? Should this number be 510,300?
- D. Please confirm that the noise emission from panel tracking motors is 78 dBA at 1 foot distance and 47 dBA at 10 meters distance (from SAR text in Section 2.3.1 in the "Noise and Traffic Study").
- E. What is the maximum level of noise produced by construction activity that "may occur before/after daylight hours" (from SAR text in Section 2.4 in the "Noise and Traffic Study")?
- F. The Excel spreadsheets (Appendix B of the "Noise and Traffic Study") provided by the Applicant say "Fleming 235 MWp Construction Noise Impact

Assessment” but the Noise Assessment states the facility is a 188-MW facility. Please explain this apparent discrepancy.

1. Why do the Excel spreadsheets identify inverters (and not solar panels/tracker motors) as the “source ID” of the “closest noise sources”?
 - a. Were tracker motors included in the noise assessment, and if not, why were they excluded?
 2. For how many days might NSA 37 experience a noise level approximate 55 dBA or more during construction activities?
 - a. Assuming no obstructions that would dampen the sound, what is the distance (in feet) that noise emissions generated from a pile driver approximate 55 dBA?
 3. Does NSA stand for “noise sensitive area,” and refer to residences/businesses and NOT the operational components of the solar facility?
 - a. Why were 25 NSAs chosen for the construction noise impact assessment?
 - b. Why were 38 NSAs chosen for the operational noise impact assessment?
 - c. HE requests a map identifying these NSAs, in relation to the Project site.
 4. Please confirm HE’s understanding that in the “As Proposed Layout” appendix of the “Operational Noise” spreadsheet, 23 of 38 NSAs will experience day and night noise levels of over 50 dBA if the Project is completed as proposed.
- G. In the second of three tables provided by the Applicant in their VII-B-6 response, why are there no structures within 600 feet from the nearest noise emitter, when the residence nearest the solar panels (and thus, nearest the tracker motors) is 212 feet away?
- H. The third table in the series of tables noted above provides the number of structures from the nearest solar panel.
1. The table indicates 4 residential structures within 300 feet of the nearest panel. However, the data provided by Kirkland in response to questions in Section IV of RFI #1 includes 5 residential structures within 300 feet of the nearest solar panel. Please clarify and provide a revised table, if necessary.

2. The table indicates that a church is located about 2,100 feet from the nearest solar panel; however, the data provided by Kirkland in response to questions in Section IV of RFI #1 state that the church is 960 feet from the nearest solar panel. Please clarify and provide a revised table, if necessary.
 3. If the third table requires revision, please either confirm that the data included the first table (distance from the property fence) is accurate or provide a revised version of the first table.
 4. Is the metal warehouse located on the one commercial property adjacent to the Project site included in the Other category?
- I. Please confirm that these three tables do not present the total number of structures within a specified distance from either the property fence, nearest noise emitter or nearest solar panel. For example, please confirm that the number of structures noted in the table within 600 feet does not include the number of structures within 300 feet and that those two numbers should not be added together to identify all the structures within 600 feet.

VIII Topography/ Scenery

- A. The Applicant's response to VIII-A-1 says "need for ... visual screening will be evaluated on a case-by-case basis." Who will evaluate the case-by-case bases?
1. Will the Board, homeowners, business owners, or others have an opportunity to participate in the decision-making process regarding which areas are screened and which are not?
 2. What type of visual screening will be used, in cases where visual screening is needed?
 - a. Should we assume these are vegetative screens?
 - b. Can they be planted early in the construction period?
 - c. How long will it take these visual screening methods to reach eight feet tall?
 - d. How long will it take these visual screening methods to reach their mature heights?
 3. Based on the Applicant's response in VII-A-2, HE assumes the 6-foot-high chain link boundary fence is transparent. Is that correct?
 4. Per the Applicant's response in VIII-A-3, please confirm any glare will be eliminated from all viewing points, especially from the high school.
 5. Please confirm Appendix F is complete with 22 pages, which includes:

- a. Appendix F – 3 pages and no text.
- b. Attachment A (Visual Simulations – 5 pages)
- c. Attachment B (Line of Sights – 4 pages)
- d. Attachment C (Photo Log – 10 pages)
 - i. HE is curious if Appendix F is missing some text from a report written by Tetra Tech.

IX Public meeting materials

- A. HE has no follow-up questions related to public meeting materials or public concerns.

X Other permitting activities

- A. HE has no follow-up questions related to other permitting activities.

XI Economic Impact Report

- A. Section VII – Table 5 notes 166 direct FTEs created in Fleming County during construction and 302 FTEs created across the State.
 - 1. The discussion on page 37 of the report suggests that the actual number of workers hired over the course of the Project would be greater than that because many positions are half-time. How many total workers will be required for construction, including part-time and full-time employees?
 - 2. In response to RFI #1, AEUG stated that approximately 25 percent of total construction workers are expected to come from within Fleming County (Question IB). That would suggest that if the Project were to require a total of 302 FTEs during construction, then about 75 FTEs would come from Fleming County. Is the Fleming County data in Table 5 inconsistent with the AEUG assumption?
 - a. Please clarify and provide a revised analysis if necessary (Tables 5, 6 and 7)
 - 3. Does the economic analysis include the additional workers required to construct the Point of Interconnection – Substation (POI-SS), as described in AEUG’s response to Question IID2 of RFI #1? (30 workers at the peak, 20 workers on average for about 18 months). If not, please revise analyses or indicate what adjustment is needed.
- B. Section VII – Table 7 provides the economic output benefits of the Project in Kentucky and in Fleming County.

1. What is the anticipated total capital cost of Project construction? If this is confidential, please indicate how we might work with AEUG on this point, i.e. provide a range. This economic benefit is noteworthy.
 - a. What portion of those costs are expenditures for materials and supplies that will be purchased in Kentucky? Purchased in Fleming County?
 2. What are the anticipated annual O&M costs associated with Project operations?
 - a. What portion of those costs are expenditures for materials and supplies that will be purchased in Kentucky? Purchased in Fleming County?
- C. Section VIII of the report states that “the expected total property taxes paid over the lifetime of the Project is over \$9.3 million...”
1. What entities will receive those tax monies?
 2. How much of the \$9.3 million total amount will each of those entities receive?

XII City of Flemingsburg Water Supply

- A. HE has no follow-up questions on this topic. We understand that AEUG plans on providing a supplemental response upon receipt of the applicable Source Water Assessment and Protection Program (SWAPP) document. Unless that supplemental response is provided to HE for review when these other responses are submitted, this issue may not be resolved in the SAR review report to the Board.

XIII Decommissioning

- A. The public meeting materials included in Volume 1 of the Application indicate a useful life of 30+ years for solar facilities in general. What is the anticipated life of the AEUG Fleming solar facility?
- B. We assume that AEUG (or any other future project owners) will abide by the commitments made in individual lease agreements regarding decommissioning activities. HE will abide by confidentiality agreements as needed to obtain a typical lease agreement.

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