

COMMONWEALTH OF KENTUCKY

BEFORE THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION
AND TRANSMISSION SITING

In the Matter of:

ELECTRONIC APPLICATION OF MCCRACKEN)	
COUNTY SOLAR LLC FOR A CERTIFICATE)	
OF CONSTRUCTION FOR AN)	
APPROXIMATELY 60 MEGAWATT)	CASE NO.
MERCHANT ELECTRIC SOLAR GENERATING)	2020-00392
FACILITY IN MCCRACKEN COUNTY,)	
KENTUCKY PURSUANT TO KRS 278.700 AND)	
807 KAR 5:110)	

SITING BOARD STAFF'S FIRST REQUEST FOR INFORMATION
TO MCCRACKEN COUNTY SOLAR LLC

McCracken County Solar LLC, (McCracken Solar), 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 July 9, 2021. The Siting Board directs McCracken Solar 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 Siting Board 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.

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

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.

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.

McCracken Solar shall make timely amendment to any prior response if McCracken Solar 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 McCracken Solar fails or refuses to furnish all or part of the requested information, McCracken Solar 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 applicable, the requested information shall be separately provided for total company operations and jurisdictional operations. When filing a paper containing personal information, McCracken Solar shall, in accordance with 807 KAR 5:001, Section 4(10), encrypt or redact the paper so that personal information cannot be read.

1. Provide a description of any construction method that will suppress the noise generated during the pile driving process (i.e., semi-tractor and canvas method; sound blankets on fencing surrounding the solar site; or any other comparable method)

that McCracken Solar plans to employ and the associated reduction in noise that each method produces.

a. Provide McCracken Solar's planned level of construction using methods that suppress noise during the pile driving process.

b. Provide the estimated additional cost the use of noise suppression methods McCracken Solar will incur.

2. Refer to Application, Exhibit 12, page 13, Construction Neighbor Zones.

a. Provide a site map designating the areas that will be "Neighbor Zones".

b. Provide McCracken Solar's additional planned construction noise mitigation for these areas other than restricting time of construction.

3. Refer to Application, Exhibit 12, page 2, Surrounding Land Use identifies a recreational area known as West Kentucky State Wildlife Management Area (WMA). Provide a description of McCracken Solar's planned construction noise mitigation efforts for the portion of the site near the WMA.

4. Refer to Application, Exhibit 12, Attachment 12.7, The Traffic Study, page 12 of the Site Assessment Report (SAR) notes that construction will take approximately 6–9 months and will produce an increase in traffic of up to 150 trips a day from construction worker/employee passenger vehicles, as well as five heavy-duty trucks and four water trucks handling delivery of equipment and material. In Exhibit 12, Attachment 12.7, the SAR provides a chart of the number of vehicle trips during construction, but does not provide all necessary information regarding the anticipated workers vehicles.

Provide answers to the following requests for information below regarding the workers and their vehicles for the proposed site.

a. Provide the number of anticipated workers, and indicate the average and peak numbers of anticipated workers.

b. You advise five heavy-duty trucks a day are expected, but Commission requires you to specifically advise what the heaviest vehicle is and what is the expected maximum weight of the largest vehicles (including any materials or equipment that the truck is hauling)?

c. Provide an approximate percentage breakdown of where the construction workers will commute from each day, if possible.

d. Are all workers anticipated to commute from their homes daily, or will any temporary housing be developed on-site?

5. Refer to Application, Exhibit 12, Attachment 12.7, page 17 regarding Impact on Road Infrastructure. You have advised that access drives and internal roads will be constructed or improved as needed to accommodate appropriate vehicles and equipment, but are there any improvement plans for the existing roads used to access the site?

6. Refer to Application, Exhibit 12, Attachment 12.7, page 18 regarding the Fugitive Dust Impact, additional information is needed beyond what is provided in the Traffic Study. You indicate internal roads will be constructed of compacted gravel and that what will be applied to reduce dust generation; what will be the protocol or frequency spraying down compacted gravel roads?

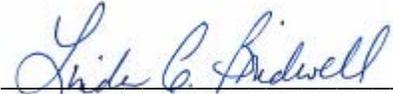
7. Refer to the Application, Exhibit 10, Attachment 10.1, page 2.

- a. Explain how the effective state income tax rate of 4.2 percent was estimated.
 - b. Explain where the approximate 20 percent of the full time equivalent workforce that will come from outside the area are assumed to stay.
8. Refer to the Application, Exhibit 10, Attachment 10.1, page 4.
- a. Explain whether the total estimated labor income and the various tax revenues from the project construction phase are premised on the six or the nine month time period.
 - b. Explain how the IMPLAN model distinguishes short term effects and long term effects.
 - c. Explain what fractional employment (ex: 4.8, 7.1, 0.7) functionally represents from the model.
 - d. Explain why was a discount rate of 2 percent was assumed.
9. Refer to the Application, Exhibit 10, Attachment 10.1, page 5.
- a. Explain whether the \$61,000 in reduced area labor income represents the labor income directly generated by the agricultural production of the proposed solar site. If not, explain how the \$61,000 figure was derived.
 - b. Explain how the value of the non-labor agriculture production was incorporated into the model.
 - c. Explain the modeling assumptions that lead to the range of labor and tax revenue during the operational phase.

10. Refer to the Application, Exhibit 10, Attachment 10.1, page 7. Explain if the 20-year contract total output of \$62,662,100 represents present value and if this value accounts for solar output degradation.

11. Refer to the Application, Exhibit 10, Attachment 10.1, page 7. Explain whether the value of the agricultural output from the proposed site is based on the average \$477 per acre obtained from the 2017 Census of Agriculture or the actual output value of what the site has produced historically. If it is the latter, explain why actual output value is not a better representation of output value.

12. Refer to the questions propounded by Wells Engineering, which are attached as an Appendix to this information request, and provide responses to those questions.



Linda C. Bridwell, PE
Executive Director
Public Service Commission *on behalf*
of the Kentucky State Board on
Generation and Transmission Siting
P.O. Box 615
Frankfort, KY 40602

DATED JUN 25 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. 2020-00392 DATED JUN 25 2021

SEVENTEEN PAGES TO FOLLOW

June 24, 2021



List of Questions for Data Request - I

McCracken County Solar, LLC
KY State Board on Electric Generation and
Transmission Siting
Case #2020-00392

Customer:
Kentucky Public Service
Commission

Prepared for:
Cornelius J Mance Jr



June 24, 2021

Prepared by:

A handwritten signature in blue ink that reads 'Collin Abell'.

Collin Abell
Power Systems Engineer

A handwritten signature in blue ink that reads 'V. Chikkeruru'.

Vasu Chikkeruru P.E.
Senior Power Systems Engineer

Reviewed by:

A handwritten signature in blue ink that reads 'Scott H Campbell'.

Scott H Campbell
Project Manager

Approved by:

A handwritten signature in blue ink that reads 'Jim Cook'.

Jim Cook
Chief Operating Officer

List of Questions for Data Request - I

Synopsis

This document is a list of questions prepared for the data (or) information to be requested as part of the application process for Solar Electric Generation Plant in McCracken, KY.

WEpsc Order: WE21052097

Public Service Commission PO:
PON2 123 2100001588

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REVISIONS

Revision	Date Issued	Issue Type	By	Description
0	06-24-2021	For Review	CA	Issue for Review & Record

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Our mission is to provide unsurpassed quality engineering service and customer support. We will conduct our business in the most professional manner possible and provide the highest quality product in a timely manner. Our value-added engineering will be recognized and provide the opportunity to earn our customers' confidence. We will use proven technology to create advanced power systems designs to support the development of the safest and most reliable systems for our clients.



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1 Introduction

The present document is a list of questions prepared for the request of data (or) additional information in the matter of Application of McCracken County Solar, LLC for a certificate of construction for an approximately 60 MW Merchant Electric Solar Generation Facility in McCracken County, KY pursuant to KRS 278.700 & 807 KAR 5:110

Scope

As part of the application evaluation process Kentucky Public Service Commission has appointed Wells Engineering PSC for providing consultancy services.

Wells Engineering contracted the following expertise based on the requirements of the project,

- i) Clover lake Consulting Services for Noise & Environmental assessment
- ii) Watters Unclaimed Property Consulting LLC for Economic impact.
- iii) Mary McClinton Clay, MAI for the review on impact on property values

The present document is created as part of the First request for information required as per the order issued for case number.2020-00392, by the commission.

Reference Document

The following documents are referenced for the creation of this document.

- i. Commonwealth of Kentucky Order for Case no. 2020-00392
- ii. Site Assessment Reports Vol.I, Vol.II for Case No. 2020-00392 by McCracken County Solar, LLC, KY
- iii. Kentucky Revised Statutes, KRS 278-706, 708, 710

2 List of Questions

In this section a detailed list of questions is described. The questions are divided into three categories as,

- 1) Technical
- 2) Environmental
- 3) Economic

1) Technical

Question#1

Electrical One-Line Diagram

Electrical One-Line diagram is a very important document required for understanding and evaluating the Electrical Power Network and Interconnection.

Applicant to submit Electrical One-Line diagram of the installation.

Question#2

Site Map

On the Site Map, reference Exhibit 2 Attachment, Applicant to indicate the Churches, Hospitals, Public & Private parks, etc on the Maps and Plot plans. This information is required to analyze the mitigations proposed by the applicant.

Question#3

Substation

Applicant to provide the substation layout diagram, if available.

Question#4

PV Cell/Solar Panel Specifications/Model #

Applicant to provide information on the specifications/ model number of the PV cell/Solar Panel to be used.

Question#5

Project Schedule

Applicant to submit an over-all tentative schedule of the project, starting from the receipt of the certificate for construction to the completion of the project. Schedule is to include the length of



each construction phase.

This document helps in understanding the total time required and major milestones involved. It will also be used to confirm the timing of the economic benefits listed.

Question#6

Construction Power

Applicant to provide information on the temporary power required for construction of the plant.

Question#7

Energy Storage Potential Hazards

Please Identify if energy storage is being used and provide SDS sheet for energy storage system.

Question#8

Energy Storage Environmental impact

Applicant to provide information on the environment impact and the energy storage system imposes. If batteries are to be used for energy storage, what is the life expectancy of the batteries? How will the batteries be disposed of? Will they be recycled?

Question#9

Fiber Optic Communication & Associated excavation

Applicant to provide information on any fiber optic or any kind of communication network installed as part of the project.

Applicant to provide information on excavation that may be required for the above.

Question#10

PV Cell/Solar Panel Manufacturing

Applicant to provide information on where the PV cells/Solar Panels are manufactured.

Applicant to indicate the % of import & % of Made in USA.

Question#11

Applicant to provide the missing information/documents from the Transmission Analysis report by "Electrical Power Engineers" submitted as Exhibit 9 Attachment 9.3. Provide the spreadsheets 'Table-4 ATC Results' & 'Table 5 Generation Projects'



Question#12

Proposed Access control

In the Application – Exhibit 12, Volume 1, Tab 12 Applicant to provide information on the proposed access control applicable to site. It may include, Fencing and Secured access, etc. Applicant to provide compliance on Physical Access control as per requirements from NERC, FERC and DHS, if found applicable.

Question#13

Applicant to provide pertinent information for,

At end of life when the system is decommissioned will the area be useful for farming? If not, what guarantee will be used to bring the site back to a useful state?

2) Environmental

Question#14

Signage

Applicant to provide information on Signage developed for the Project.

Based on the revision to the McCracken County Zoning Code, this project will require the appropriate signage for safety for both construction and operation of the facility. Has a signage plan been developed? If it has, please provide it and if it has not, please develop it and provide it.

Question#15

Security Fencing Plan

Applicant to provide a security fencing plan as required by the revised zoning code.

Question#16

Comprehensive Ground Maintenance Plan

Applicant to provide a comprehensive ground maintenance plan as required by the McCracken County Zoning Code.



Question#17

Traffic Analysis

What are the specific plans to keep the area safe from a traffic perspective both during construction and operation of the facility? A detailed plan should be submitted to the Kentucky Public Service Commission before construction commences.

Question#18

Fugitive Dust

What will the specific impacts of fugitive dust be on local project area residences and business be during construction and during operation? Please estimate specific levels of fugitive dust, PM and PM10 on a map of the project area.

Question#19

Bats

Three species of bats that are either threatened or endangered are potentially located within the site area. Additionally, what potential mitigation for these species will be provided both during construction and operation?

Question#20

Bald Eagle

The Bald Eagle, a Kentucky Threatened Species could be found in the site area. What mitigation should be performed regarding this species?

Question#21

Consultation with US Army Corps of Engineers (or) US Fish & Wildlife Service

Is a consultation with the U.S. Army Corps of Engineers and/or the US Fish and Wildlife Service planned regarding mitigation for bat, bird and fish endangered, threated or sensitive species?



3) Economic

Question#22

Applicant Business Structure

General Corporate Group Structure

Source: McCracken County Solar LLC's Application for a Certificate to Construct a Merchant Generating Facility, Case No. 2020-00392, page 1, paragraph 1.

Explanation: In the above-referenced paragraph, the corporate information of the Applicant, its associated parent LLC, contact information, and (potential) ultimate parent are provided.

Suggested: Provision of a table of organization or similar structural representation from McCracken County Solar, LLC through its ultimate parent organization, including any intermediate ownership and ownership percentages.

Purpose: Provides understanding of ownership, management, and ultimate responsibilities.

Question#23

Applicable Real Estate Analyses

Question Regarding Real Estate Properties Committed

Source: McCracken County Solar LLC's Application for a Certificate to Construct a Merchant Generating Facility, Case No. 2020-00392, Application Exhibits KRS 278.706(2)(e), Exhibit 5 [Volume 1, Tab 5], pages 6 – 10 & KRS 278.706(2)(j) & Exhibit 10 [Volume 1, Tab 10], Attachment 10.2 pages 2 - 7

Explanation: At both locations there have been described the parcels of real estate upon which the proposed solar energy facilities are to be placed or incorporated. The parcels and descriptions as identified in the two Exhibits do not match. The composite maps on the 3rd and 4th pages of Exhibit 2 and pages 5 through 10 of Exhibit 5 (pages 6 – 10) show contiguous parcels. Of the three parcels in Attachment 10.2, parcel number 020-00-00-017 is not contiguous with parcels 013-00-00-026 & 013-00-00-030.

List of Questions for Data Request - I

McCracken County Solar, LLC
KY State Board on Electric Generation and Transmission Siting
Case #2020-00392



Suggested: Obtain an explanation and a reconciliation of the sets of real estate descriptions and, if necessary, modification of all calculations, descriptions, estimations, and other discrepancies resulting from these differing identifications

Purpose: Reconciliation of the real estate parcels included in the project and the representations resulting therefrom in each Exhibit. It would appear that there is a misrepresentation to either parcel number 020-00-00-017 or parcel number 013-00-00-026; or, in the alternative, an omitted fourth parcel or independently owned and uninvolved parcel making those two included parcels non-contiguous.

Question#24

Real Estate for Substation and Powerlines from Solar Generation Fields

Source: McCracken County Solar LLC's Application for a Certificate to Construct a Merchant Generating Facility, Case No. 2020-00392, Application Exhibits KRS 278.706(2)(b), Exhibit 2 [Volume 1, Tab 2]. Note also the substation and transmission lines are not shown in maps displayed in Application Exhibits KRS 278.706(2)(e), Exhibit 5 [Volume 1, Tab 5], pages 6 – 10 & KRS 278.706(2)(j) & Exhibit 10 [Volume 1, Tab 10], Attachment 10.2 pages 2 - 7

Explanation: This exhibit purposes to describe the proposed site and attributes within and nearby to it. On the first map, on Exhibit 2, page 5, the site is shown for the fields together with lines leading to and from a Project Substation. The lease, ownership and easement (if applicable) are not described nor any relationship between the Applicant for this project or the land owner.

Requested: Obtain a description of the nature and means for any lease, easement and ownership of said properties being used to transmit or perform distribution or substation activities involved.

Purpose: Currently no information has been found for the connection of the electricity generated from the solar generation fields into the power grid. Note that the transmission line and substation may be owned by Big Rivers Electric Corporation referenced in the Application on page 2, paragraph 3.



Question#25

Usage of the 30-year Operational Life for Economic Impact

Source: McCracken County Solar LLC'S APPLICATION FOR A CERTIFICATE TO CONSTRUCT A MERCHANT GENERATING FACILITY, Case No. 2020-00392, Application Exhibits KRS 278.706(2)(j), Exhibit 10 [Volume 1, Tab 10].

Explanation: In the narrative of Exhibit 10, page 3, under Output, the Applicant asserts that the Project is anticipated to operate for at least 30 years, although the initial contract for sale (presumed to be to Big Rivers Electrical Corporation, see Application, page 2, paragraph 3) of produced electricity generated is 20 years. Estimations beyond the 20 year sales contract, absent reasonable guarantee or anticipation of extension, would appear to excessively inflate projections of economic impact.

Requested: Consider whether the projections of 30 years should be reduced to 20 years for economic impact for the known contractual period under contract.

Purpose: By using a 20 year operational standard consistent with the terms of the electrical sales contract, a truer and more likely estimation of economic impact could be assumed.



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