Horseshoe Bend Solar, LLC

Kentucky State Board on Electric Generation and Transmission Application

Application Documents

Case No. 2020-00190

December 2020

Executive Summary

Horseshoe Bend Solar, LLC ("Horseshoe Bend") is applying to construct a 60-megawatt alternating current photovoltaic electricity generation facility in Green County, Kentucky. This site was carefully chosen due to its proximity to existing transmission line infrastructure with sufficient capacity to interconnect a project of this size, the availability of large contiguous parcels of land, the ability to avoid disturbance to residential communities, and other site features such as topography. Development of the 500+ acre site will create over 175 construction jobs with a corresponding payroll in the first year of almost $10 million, and proposed new property tax payments to Green County of over $1 million over time.

Horseshoe Bend has signed long-term agreements with six local landowners who have agreed to lease portions of their land to the facility. These landowners are very supportive of the solar project and have determined after careful consideration that this is the best use of their land for the duration of the lease term.

The Horseshoe Bend facility is located within PJM Interconnection territory and PJM will manage the interconnection of the Project in coordination with East Kentucky Power Cooperative (EKPC), which owns the onsite transmission infrastructure. Interconnection studies, paid for by Horseshoe Bend, have been in process for 1.5 years and will identify any infrastructure upgrades the project will contribute to, and allocate cost to the project accordingly. The project will interconnect to an on-site, existing transmission line owned by EKPC. At Horseshoe Bend's expense, EKPC will build a new tap line to interconnect the Project.

The project will likely enter into a long-term power purchase agreement with a company that has made a commitment to source renewable energy. A number of Kentucky-based companies and large Kentucky employers have made commitments to source renewable energy to power their Kentucky operations. Projects such as Horseshoe Bend will allow these companies to meet their objectives locally, keeping the tax revenue and jobs created by the new renewable energy projects in-state.

There is one residential neighborhood (as defined by KRS 278.700(6)) within two thousand (2,000) feet of the Project's facilities, but there are no schools, public or private parks within 2 miles of the project's radius. Following the submission of this application Horseshoe Bend will seek a deviation from the setback requirement that would apply to the residential neighborhood. As the application will demonstrate, reasonable and appropriate efforts have been taken to minimize the impact to residences in the vicinity of the project.

Carolina Solar Energy III, LLC, the parent company of Horseshoe Bend, has been in business since 2004. Carolina Solar Energy has developed similarly-sized solar projects in surrounding states and is excited to be working to develop new solar projects in the Commonwealth of Kentucky. Carolina Solar Energy is a woman-owned and run business with a sterling record of successful cooperation with local and state officials, minimizing impacts to surrounding neighbors, and developing economically viable solar projects. Horseshoe Bend looks forward to cooperating with the Kentucky Siting and Transmission Board on this application and sharing more about the Horseshoe Bend project.

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1. Applicant Information

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

COMPLIANCE: Please see below for the requested information.

- Name: Horseshoe Bend Solar, LLC
  Attn: Carson Harkrader
- Address: 400 W Main St
  Suite 503
  Durham, NC 27701
- Phone: (919) 682-6822

2. Description of Proposed Site

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

COMPLIANCE: The proposed Horseshoe Bend Solar Facility (the Project) will be a 60-megawatt alternating current (MWac) photovoltaic electricity generation facility. The Project is to be located in Green County, near the unincorporated community of Exie. The power generated by the Project will be sold on the open market through an existing transmission line that crosses the property.

The Project will be built on up to 550 acres which has historically been used as pasture and crop land. The equipment onsite will consist of crystalline solar panels, racking, inverters, transformers, a DC-coupled energy storage system, one substation transformer, and associated wiring and balance of system.

The racking system used to fix the solar panels to the ground has a small footprint that does not use concrete, and the panels are not considered impervious as rainwater can travel over and around the panels, making this a low impact development. The panels and racking are no more than 15 feet high at the highest point. The racks will be placed directly onto grass. Gravel will be placed on the access roads throughout the site, and will not be placed under the solar panels.

A fence meeting the National Electric Safety Code requirements, typically a six-foot fence with three strings of barbed wire at the top, will enclose the facility. The community has provided feedback that frequent signage along the security fence is unsightly, and should be tempered in use. The National Electric Safety Code includes requirements on safety signage along the security fence, which the Project will comply with.

Applicant proposes sections of vegetative buffers to help screen the view of the facility from a residential home and a historic family cemetery that do not have existing vegetation to block the view of the Project. The vegetative buffer will consist of two staggered rows of evergreen shrubs that have a mature height of approximately 15 feet. The rows will be spaced approximately 15 feet apart, and the shrubs will be at least three feet in height at time of planting. See the site plan, Attachment A of the Site Assessment Report, for the proposed location of the vegetative buffers. The cemetery is described in detail in the Mitigation Measures section of the Site Assessment Report.

At least 2 acres of native pollinator species will be planted on the Project site, likely within the setback area as marked on the site plan map in Attachment A of the Site Assessment Report.

Pollinating insects are in decline across the US, and pollinator plantings at solar facilities like Horseshoe Bend can support healthy local populations of pollinators.[1] Healthy pollinator populations are essential for certain agricultural crops including soybeans, and the US Department of Agriculture estimates that 35 percent of the world's food crops depend on animal pollinators to reproduce.[2]

There are 2 types of inverters commonly used on solar facilities; central inverters and string inverters. Central inverters are typically located towards the interior of the solar farm, and there is usually 1 central inverter per few dozen rows of solar panels. String inverters are smaller units that are typically attached to the end of each row of solar panels. At the time of this application the Project has not committed to using one or the other technology, and will make this decision prior to construction. If central inverters are used, there will be approximately 15 central inverters in the facility.

The energy storage system is typically housed in a structure similar to a shipping container. HVAC systems are housed on the outside of the structure. There will be approximately 15 energy storage container areas in the facility. The energy storage units are typically located in central locations throughout the site, co-located with central inverters, if central inverters are used.

A map showing the location of residential structures, schools, and public and private parks in relation to the proposed project is located in Attachment A. There are no schools, public or private parks within 2 miles of the Project's radius, and there is 1 residential neighborhood (per KRS 278.701(6)) within 2000ft of the Project's radius.

The site plan and information about the equipment that will be used in the Project were presented to the public through various means throughout the Project's public outreach efforts, as described in Section 6 of this Siting Board Application.

[1] https://www.scientificamerican.com/article/solar-farms-shine-a-ray-of-hope-on-bees-and-butterflies/
[2] https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/pollinate/

3. Public Notice Evidence

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

1. Landowners whose property borders the proposed site; and

2. The general public in a newspaper of general circulation in the county or municipality in which the facility is proposed to be located

COMPLIANCE: A sample letter that was sent to landowners whose property borders the proposed site, followed by the list of addresses and names of those landowners who were sent notices on December 7th, 2020 is contained in Attachment B. Two copies of this notice were mailed to each landowner; one via regular US Mail and one via USPS Certified Mail. Please see Attachment B for certified mail receipts.

Also contained in Attachment B is the affidavit of publication of the notice published in the Greensburg Record-Herald on December 9, 2020, which is the newspaper of general circulation in Green County, as well as a copy of that notice.

4. Compliance with Local Ordinances and Regulations

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

COMPLIANCE: The Project lies entirely in Green County. There are no setback requirements established by a planning and zoning commission for the location of the project, and no noise ordinance that applies to the Project. A letter from Green County Judge Executive John H. Frank confirming the lack of planning and zoning and noise ordinance is submitted as Attachment C.

Applicant certifies that the Project will follow any applicable local ordinances and regulations concerning noise control, and with any applicable local planning and zoning ordinances. A statement certifying these facts is included in Attachment D.

5. Setback Requirements

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

COMPLIANCE: Horseshoe Bend Solar is not proposed to be located on the site of a former coal processing plant, nor will it use any waste coal as a fuel source. The Project site does not have any existing electricity generating facilities on-site. Green County does not have established setback requirements for this location, nor has a planning unit enacted any setback requirements for this location, per the information provided in Section 4 above.

The Project will not include any exhaust stacks or wind turbines as part of the facility, therefore there is no established 1,000 foot setback requirements from the property boundary of any adjoining property owner to the energy generating facilities.

There is one residential neighborhood (as defined by KRS 278.700(6)) within two thousand (2,000) feet of the Project. Pursuant to KRS 278.704(4), Horseshoe Bend Solar will be moving the Siting Board for a deviation from this setback requirement. See Attachment A for a map showing the residential neighborhood in relation to the Project. More information about the neighborhood will be provided in Applicant's motion for deviation.

6. Public Notice Report

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

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

COMPLIANCE: Horseshoe Bend Solar, LLC, through its parent Carolina Solar Energy III, LLC (collectively, "Carolina Solar Energy"), has made a substantial effort to engage the public in numerous ways regarding the Project.

Representatives of Carolina Solar Energy first reached out to Green County Judge/Executive John Frank in September 2019, and met in person to introduce Carolina Solar Energy and to let him know about the location of the Project. Judge Frank also attended an introduction to solar energy facilities presented by solar companies including Carolina Solar Energy, which took place in Marion County in October of 2019. Attachment E outlines our additional community engagement outside of the public meeting.

Due to the COVID-19 pandemic and in compliance with Kentucky Governor Andy Beshear's Executive Order, dated March 18, 2020, and subsequent executive orders, the public meeting for the Project was held virtually. The Project filed a Motion for Approval of Form of Public Meeting with the Siting Board, dated June 17, 2020, setting forth a plan to hold the public meeting online. The Siting Board issued an order dated June 23, 2020, approving a virtual public meeting and setting forth additional requirements for the public meeting.

The public meeting was held via Zoom at 5:30pm CDT on July 16, 2020, with an in-person screening option. The meeting consisted of a prerecorded video describing the project and solar technology, followed by a question and answer period where attendees, both virtual and in person, could ask questions to the panel, who all attended virtually via Zoom. The physical

portion of the meeting was held at the Greensburg Community and Senior Center, 110 North 1st Street, Greensburg.

In addition to holding the public meeting, Carolina Solar Energy displayed a large 24x36'' printed copy of the layout map of the solar project on an easel at the entrance to the Green County Courthouse for the 3 business days prior to the public meeting, together with a copy of the public notice about the public meeting providing instructions on how to register and attend.

A notice announcing the public meeting was printed in the Greensburg Record-Herald on July 1, 2020. The Project also mailed letters, dated June 26, 2020, to all adjoining landowners notifying them of the virtual meeting, and providing instructions on how to reserve a spot at the physical screening of the public meeting.

Attachment F provides the affidavit of publication for this notice, a copy of the newspaper notice, a copy of the letter sent to neighboring landowners, images of photos taken at the local screening of the virtual public meeting, and copies of 2 front page news articles published in the Greensburg Record-Herald regarding the public meeting and the Project in general. One of the front page articles includes the layout map image of the Project, showing its location.

The prerecorded video shown at the public meeting included presentations from four representatives of Carolina Solar Energy and experts in solar energy, as well as a drone flyover video of a similarly-sized utility scale solar project, with verbal explanation of each component of the project. The video is available on the Carolina Solar Energy website for the Project, https://www.carolinasolarenergy.com/projects-in-development-source/horseshoe-bend, and the letters advising adjacent neighbors of the public meeting included a website link to the page that includes the video and other information about the project, including the site plan, real estate impact report, and a fact sheet.

The representatives of Carolina Solar Energy and experts in solar energy who were in the video and also present remotely at the Zoom video conference are listed below, with a description of the topics each person covered:

- Carson Harkrader, CEO of Carolina Solar Energy, made welcome and introductory comments about the project and presentation, explained why this solar project is being proposed in Green County, and discussed local benefits such as real estate taxes and construction jobs.
- Christopher Jones, Project Manager, discussed the components that make up a solar farm, showed a single solar panel from all angles, discussed the site plan, and narrated the drone flyover of an existing solar project.
- Chris Sandifer, a professional engineer who has decades of experience working for both utilities and solar companies interconnecting solar projects and other energy projects,

made statements related to solar technology and health and safety concerns around solar farms.

- Rich Kirkland, licensed real estate appraiser registered in Kentucky, discussed his research on utility scale solar and neighboring residential property values.

7. Efforts to locate near Existing Electric Generation

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

COMPLIANCE: It is rare for utility-scale solar projects to be co-located with existing electricity generating infrastructure, such as a coal or natural gas fired power plant. Efforts were made to site the Project where there is existing electricity transmission infrastructure.

The project will interconnect to an on-site, existing transmission line owned by East Kentucky Power Cooperative (EKPC). At the project's expense, EKPC will build a new tap line to interconnect the Project.

8. Proof of Service to County and Municipality Officials

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

COMPLIANCE: A copy of the Siting Board application for Horseshoe Bend Solar, LLC was electronically transmitted to the Judge/Executive of Green County, John Frank on the date of electronic filing of this application. On inquiry by Horseshoe Bend, Judge Frank indicated that he would accept an electronic copy of the application, with a paper copy mailed to him separately after the electronic application.

9. Effect on Kentucky Electricity Generation System

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

COMPLIANCE: The Project will inject renewable electricity generated by the sun into the electricity transmission system in Kentucky. This project also includes an option for a dc-coupled energy storage system, which if implemented, is designed to store excess electricity generated by the solar panels during the day, in order to supply it to the grid at other times. The energy storage system will also likely assist with providing capacity resources and other auxiliary services to the transmission grid such as frequency regulation. The dc-coupled energy storage system is included within the Project's interconnection applications, but can be removed without penalty if it is not considered economically feasible.

The Project is located within the territory of PJM Interconnection LLC (PJM). PJM is the Regional Transmission Organization for 13 states including parts of Kentucky, and is managing the interconnection of the Project in coordination with East Kentucky Power Cooperative (EKPC), which owns the transmission infrastructure to which the project is proposing to interconnect. The interconnection study process in PJM involves three study phases; Feasibility Study, System Impact Study, and Facilities Study.

Horseshoe Bend Solar, LLC made an interconnection application to PJM in July 2019 to interconnect the project on the Green County – Summer Shade 161kV transmission line. Following the application, a kickoff call with PJM and EKPC was held to begin the three-step study process.

The Feasibility Study was completed in January of 2020, and the Feasibility Study Report can be found in Attachment H.

The System Impact Study determines potential impacts to the regional electric grid and the need for any network upgrades to mitigate potential impacts. The System Impact Study Report for the Project was issued in August 2020 and can be found in Attachment I.

The third and final step, the Facilities Study, is currently underway and expected to be issued in mid-2021. Concurrent with this final step, LG&E/KU is completing an affected systems study to determine whether there will be any upgrades required to LG&E/KU facilities. If so, applicable upgrade costs will be borne by the Project. PJM has confirmed that there are no other utilities that have the potential to be affected by the Project or that require affected systems studies.

A key purpose of PJM, EKPC and LG&E/KU's study process is to estimate the costs of any required upgrades, both at the Project site as well as elsewhere within the PJM transmission system,

including other utilities outside of PJM, which the Project would create or contribute to, and to allocate such costs to the Project. The Project will be required to pay for any identified costs in order to interconnect and deliver electricity into the PJM and EKPC transmission system. In addition, Applicant has paid PJM and LG&E/KU for the costs of the study process.

10. Effect on Local and Regional Economies

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

COMPLIANCE: See Attachment J for a report on the projected impact of the Project on local and regional economies, written by Paul A. Coomes, Ph.D, an Emeritus Professor of Economics from the University of Louisville.

On page 1 of the report, it states:

> "There are two primary impacts expected from the project. First, there will be a one-time spike in construction and linked jobs as the site is constructed over approximately one year. Second, there will be four decades of new tax (PILOT) payments to local jurisdictions in Green County due to the increased value of real estate and the new tangible property installed at the site. Using company estimates of construction jobs and payroll, I estimate that there will be a total of 186 new jobs in the County in year one, with new payroll of $9.92 million. And, the PILOT agreement will result in $1.44 million in payments to County jurisdictions over the next forty years."

In addition to the economic impacts described in Professor Coomes' report, the Project will sell electricity and green credits on the open market, likely entering into a long-term power purchase agreement with a company that has made a commitment to source renewable energy. This power purchase agreement is typically signed before the Project goes into construction. A number of Kentucky-based companies and large Kentucky employers have made commitments to source renewable energy to power their Kentucky operations. Projects such as Horseshoe Bend will allow these companies to meet their objectives locally, keeping the tax revenue and jobs created by the new renewable energy projects in-state.

11. Record of Environmental Violations

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

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

12. Site Assessment Report

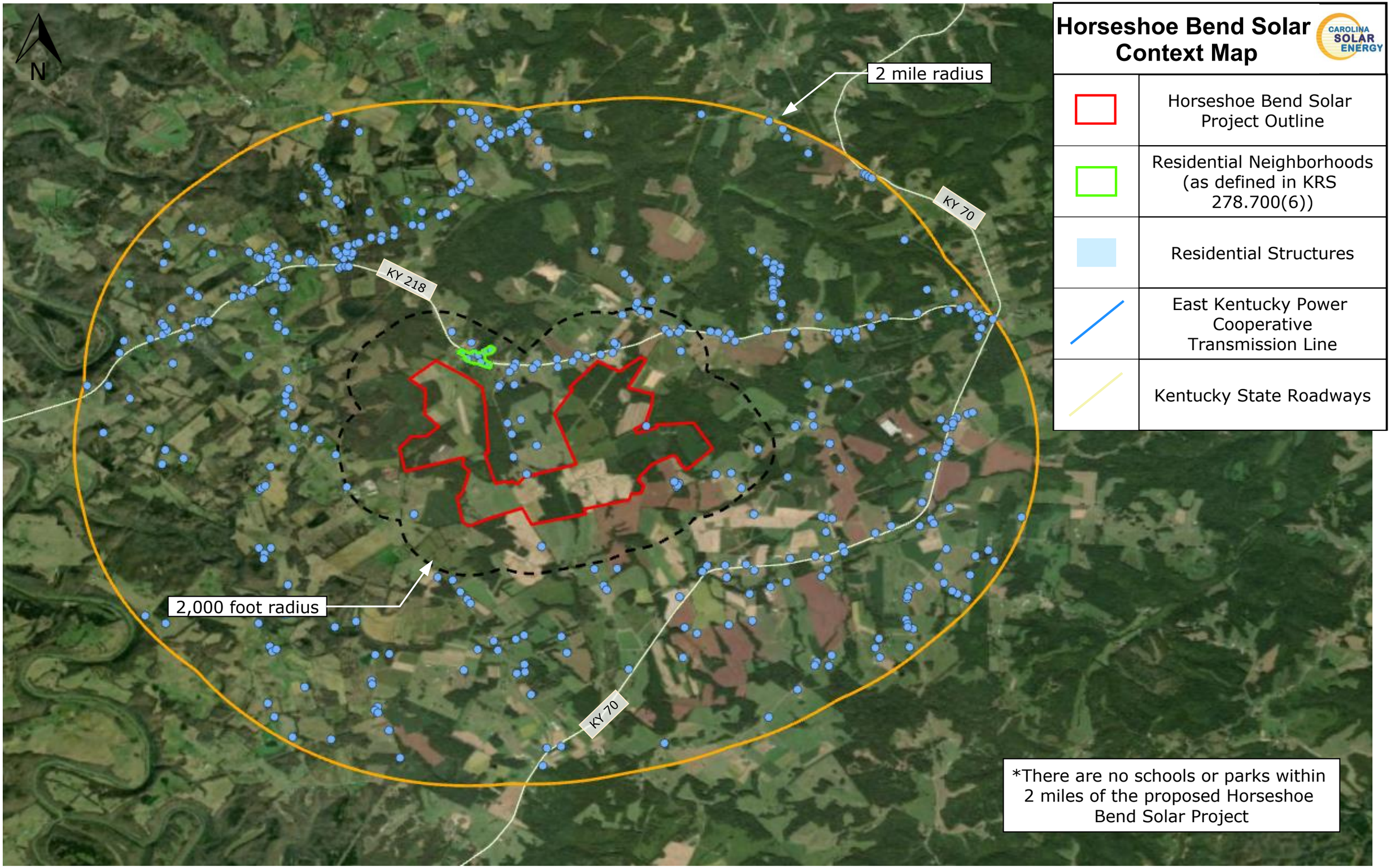
REQUIREMENT: per KRS 278.706(2)(l); *A site assessment report as specified in KRS 278.708. The applicant may submit and the board may accept documentation of compliance with the National Environmental Policy Act (NEPA) rather than a site assessment report*

COMPLIANCE: The Site Assessment report is being contemporaneously filed herewith; please see the separate document titled "Horseshoe Bend Solar: Site Assessment Report" and labeled as Attachment K.

Attachment A

Context Map

Horseshoe Bend Solar Context Map



	Horseshoe Bend Solar Project Outline
	Residential Neighborhoods (as defined in KRS 278.700(6))
	Residential Structures
	East Kentucky Power Cooperative Transmission Line
	Kentucky State Roadways

*There are no schools or parks within 2 miles of the proposed Horseshoe Bend Solar Project

Attachment B

Proof of Notice of Application

400 West Main, Suite 503 Durham, NC 27701
919-682-6822 www.carolinasolarenergy.com

Name
Add1
Add2

CERTIFIED MAIL, RETURN RECIEPT REQUESTED
With copy to Regular US Mail

Re: Horseshoe Bend Solar Notice of Application

Dear Name,

This letter is to inform you that Horseshoe Bend Solar, LLC is proposing to construct and operate a solar photovoltaic facility adjacent to property you own in Green County. The Horseshoe Bend Solar Project is proposed to be located at approximately 1648 KY 218, Greensburg, KY 42743. The proposed facility and its applicants previously hosted a virtual public meeting about the project on July 16th, 2020, with a physical showing occurring at the Greensburg Community and Senior Center.

The solar technology used is photovoltaic, and the solar panels sit on racks that are up to 15 feet tall that rotate once per day on a North-South axis to track the sun throughout the day. The 60-megawatt facility will contain solar panels, inverters, an energy storage system, a project substation transformer, and an associated balance of wiring system. The Horseshoe Bend Solar Project will be sited on approximately 550 acres of land.

Horseshoe Bend Solar, LLC is required to file an application for construction and operation of the proposed facility. This application is subject to the approval of the Kentucky State Siting Board on Electric Generation and Transmission Siting, which can be reached at P.O. Box 615, 211 Sower Boulevard, Frankfort, Kentucky 40602-0615, or via phone at (502) 564-3940.

A person who wishes to become a party to a proceeding before the board may, by written motion filed no later than thirty (30) days after the application has been submitted, request leave to intervene.

A party may, upon written motion filed no later than thirty (30) days after an application has been filed, request the board to schedule an evidentiary hearing at the offices of the Public Service Commission, 211 Sower Boulevard, Frankfort, Kentucky 40602-0615.

400 West Main, Suite 503 Durham, NC 27701
919-682-6822 www.carolinasolarenergy.com

A request for a local public hearing or local public information meeting shall be made by at least three (3) interested persons who reside in the county or municipal corporation in which the plant is proposed to be located. The request shall be made in writing and shall be filed within thirty (30) days following the filing of a completed application.

Any questions related to the application or its process may be directed to the Kentucky State Siting Board, referenced above.

Sincerely,

Carson Harkrader
CEO

400 West Main, Suite 503 Durham, NC 27701
919-682-6822 www.carolinasolarenergy.com

Name
Add1
Add2

CERTIFIED MAIL, RETURN RECIEPT REQUESTED
With copy to Regular US Mail

Re: Horseshoe Bend Solar Notice of Application

Dear Name,

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The solar technology used is photovoltaic, and the solar panels sit on racks that are up to 15 feet tall that rotate once per day on a North-South axis to track the sun throughout the day. The 60-megawatt facility will contain solar panels, inverters, an energy storage system, a project substation transformer, and an associated balance of wiring system. The Horseshoe Bend Solar Project will be sited on approximately 550 acres of land.

Horseshoe Bend Solar, LLC is required to file an application for construction and operation of the proposed facility. This application is subject to the approval of the Kentucky State Siting Board on Electric Generation and Transmission Siting, which can be reached at P.O. Box 615, 211 Sower Boulevard, Frankfort, Kentucky 40602-0615, or via phone at (502) 564-3940.

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Any questions related to the application or its process may be directed to the Kentucky State Siting Board, referenced above.

Sincerely,

Carson Harkrader
CEO

7019 2280 0001 0518 4068

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at *www.usps.com®*.

Greensburg, KY 42743 OFFICIAL USE

Certified Mail Fee	$3.55	0178 2
Extra Services & Fees (check box, add fee as appropriate)		
☒ Return Receipt (hardcopy)	$2.85 $0.00	
☐ Return Receipt (electronic)	$0.00	Postmark Here
☐ Certified Mail Restricted Delivery	$0.00	
☐ Adult Signature Required	$0.00	
☐ Adult Signature Restricted Delivery	$	
Postage	$0.55	12/07/2020
Total Postage and Fees	$6.95	

Sent To VANDA LILE
Street 465 LILETOWN ROAD
City, State, ZIP+4® GREENSBURG, KY 42743

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7019 2280 0001 0518 4594

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at *www.usps.com®*.

Campbellsville, KY 42718 OFFICIAL USE

Certified Mail Fee	$3.55	0178 2
Extra Services & Fees (check box, add fee as appropriate)		
☒ Return Receipt (hardcopy)	$2.85 $0.00	
☐ Return Receipt (electronic)	$0.00	Postmark Here
☐ Certified Mail Restricted Delivery	$0.00	
☐ Adult Signature Required	$0.00	
☐ Adult Signature Restricted Delivery	$	
Postage	$0.55	12/07/2020
Total Postage and Fees	$6.95	

Sent To ROBERT & MICHAEL KARNES KARNES
Street 2636 FINLEY RIDGE RD
City, State, ZIP+4® CAMPBELLSVILLE, KY 42718

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7019 2280 0001 0518 4587

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at *www.usps.com®*.

Greensburg, KY 42743 OFFICIAL USE

Certified Mail Fee	$3.55	0178 2
Extra Services & Fees (check box, add fee as appropriate)		
☒ Return Receipt (hardcopy)	$2.85 $0.00	
☐ Return Receipt (electronic)	$0.00	Postmark Here
☐ Certified Mail Restricted Delivery	$0.00	
☐ Adult Signature Required	$0.00	
☐ Adult Signature Restricted Delivery	$	
Postage	$0.55	12/07/2020
Total Postage and Fees	$6.95	

Sent To CHARLES V & VERONICA JUDD
Street 187 JIM MEADOWS RD
City, State, ZIP+4® GREENSBURG, KY 42743

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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☐ Adult Signature Required	$0.00	
☐ Adult Signature Restricted Delivery	$	
Postage	$0.55	12/07/2020
Total Postage and Fees	$6.95	

Sent To MICHAEL & LAURA HUNT
Street 3450 HWY 218
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Extra Services & Fees (check box, add fee as appropriate)		
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☐ Adult Signature Required	$0.00	
☐ Adult Signature Restricted Delivery	$	
Postage	$0.55	12/07/2020
Total Postage and Fees	$6.95	

Sent To GREEN TAYLOR WATER DIST
Street 1 BLUFF BOOM RD
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☐ Return Receipt (electronic)	$0.00	Postmark Here
☐ Certified Mail Restricted Delivery	$0.00	
☐ Adult Signature Required	$0.00	
☐ Adult Signature Restricted Delivery	$	
Postage	$0.55	12/07/2020
Total Postage and Fees	$6.95	

Sent To JOEY & JENNIFER HOUK
Street 280 GRADY THOMPSON RD
City, State, ZIP+4® GREENSBURG, KY 42743

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☒ Return Receipt (hardcopy)	$0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.55
Total Postage and Fees	$6.95

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Sent To LOIS RAY LEE

Street 3336 HWY 218

City, GREENSBURG, KY 42743

PS F ...structions

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Extra Services & Fees (check box, add fee as appropriate)	$2.85
☒ Return Receipt (hardcopy)	$0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.55
Total Postage and Fees	$6.95

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Sent To MARCUS W & SHELLY WRIGHT

Street an 615 JIM MEADOWS RD

City, Stat GREENSBURG, KY 42743885

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Extra Services & Fees (check box, add fee as appropriate)	$2.85
☒ Return Receipt (hardcopy)	$0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.55
Total Postage and Fees	$6.95

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Sent To LEE ALBERT & FREDA SCHUNKE

Street and 2091 MT LEBANON CHURCH RD

City, State GREENSBURG, KY 42743

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☒ Return Receipt (hardcopy)	$0.00
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Postage	$0.55
Total Postage and Fees	$6.95

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Sent To TERRY & JANICE YOUNG

Street ai 2711 HWY 218

City, Sta GREENSBURG, KY 42743

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Postage	$0.55
Total Postage and Fees	$6.95

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Sent To HOWARD & LUCILLE MARS

Stree 3635 HWY 218

City, GREENSBURG, KY 42743

PS F ...structions

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☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.55
Total Postage and Fees	$6.95

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Sent To BRANDON LOWE

Street and 529 JIM MEADOWS RD

City, State, GREENSBURG, KY 42743

PS Form ...tions

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☐ Return Receipt (electronic)	$0.00	
☐ Certified Mail Restricted Delivery	$0.00	
☐ Adult Signature Required	$0.00	
☐ Adult Signature Restricted Delivery	$	
Postage	$0.55	12/07/2020
Total Postage and Fees	$6.95	

Sent To LESTER & JUDY COOMER THOMPSON
Street 67 JIM MEADOWS RD
City, S GREENSBURG, KY 42743
PS Fo ...structions

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Postage	$0.55	12/07/2020
Total Postage and Fees	$6.95	

Sent To GRADY & ELIZABETH THOMPSON
Street and A 356 GRADY THOMPSON LANE
City, State, GREENSBURG, KY 42743
PS Form 3 ...ions

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☐ Return Receipt (electronic)	$0.00	
☐ Certified Mail Restricted Delivery	$0.00	
☐ Adult Signature Required	$0.00	
☐ Adult Signature Restricted Delivery	$	
Postage	$0.55	12/07/2020
Total Postage and Fees	$6.95	

Sent ORVILLE SKAGGS
Stree 3269 HWY 218
City, GREENSBURG, KY 42743
PS F ...structions

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☐ Return Receipt (electronic)	$0.00	
☐ Certified Mail Restricted Delivery	$0.00	
☐ Adult Signature Required	$0.00	
☐ Adult Signature Restricted Delivery	$	
Postage	$0.55	12/07/2020
Total Postage and Fees	$6.95	

Sent To ERIK THOMPSON
Street an 2380 HWY 218
City, State GREENSBURG, KY 42743
PS Form ...ctions

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Extra Services & Fees (check box, add fee as appropriate)		
☐ Return Receipt (hardcopy)	$2.85 $0.00	Postmark Here
☐ Return Receipt (electronic)	$0.00	
☐ Certified Mail Restricted Delivery	$0.00	
☐ Adult Signature Required	$0.00	
☐ Adult Signature Restricted Delivery	$	
Postage	$0.55	12/07/2020
Total Postage and Fees	$6.95	

Sent PEARL PERKINS
Stree 2629 HWY 218
City, GREENSBURG, KY 42743
PS F ...structions

7019 2280 0001 0518 3887

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Extra Services & Fees (check box, add fee as appropriate)		
☒ Return Receipt (hardcopy)	$2.85 $0.00	Postmark Here
☐ Return Receipt (electronic)	$0.00	
☐ Certified Mail Restricted Delivery	$0.00	
☐ Adult Signature Required	$0.00	
☐ Adult Signature Restricted Delivery	$	
Postage	$0.55	12/07/2020
Total Postage and Fees	$6.95	

Sent To KIRBY A & TOMMY R PRUITT
Street 515 GABE RD
City, S GREENSBURG, KY 42743
PS Fo ...tructions

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☒ Return Receipt (hardcopy)	$0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.55
Total Postage and Fees	$6.95

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12/07/2020

Sent To E W PERKINS

Street a 3514 HIGHWAY 218

City, Sta GREENSBURG, KY 42743

PS For ...ructions

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☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.55
Total Postage and Fees	$6.95

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12/07/2020

Sent To JAMES HOLLIS & CONNIE PATTERSON

Street and 2814 HWY 218

City, State, GREENSBURG, KY 42743

PS Form ...tions

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Extra Services & Fees (check box, add fee as appropriate)	$2.85
☒ Return Receipt (hardcopy)	$0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.55
Total Postage and Fees	$6.95

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12/07/2020

Sent T ANTHONY & PEGGY MEADOWS

Stree 917 JIM MEADOWS RD

City, GREENSBURG, KY 42743

PS F ...structions

7019 2280 0001 0518 3856

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Extra Services & Fees (check box, add fee as appropriate)	$2.85
☒ Return Receipt (hardcopy)	$0.00
☐ Return Receipt (electronic)	$0.00
☐ Certified Mail Restricted Delivery	$0.00
☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.55
Total Postage and Fees	$6.95

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12/07/2020

Sent T ROYCE MORGAN

Street 3369 LILETOWN RD

City, S GREENSBURG, KY 42743

PS Fo ...tructions

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☐ Adult Signature Required	$0.00
☐ Adult Signature Restricted Delivery	$
Postage	$0.55
Total Postage and Fees	$6.95

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12/07/2020

Sent To WILLIAM E AND WANDA MCKINNEY

Street 529 JIM MEADOWS RD

City, S GREENSBURG, KY 42743

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☐ Adult Signature Required	$0.00
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Postage	$0.55
Total Postage and Fees	$6.95

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Sent To ALVIN DEAN MATNEY

Street a 366 LEE CEMETERY RD

City, Sta GREENSBURG, KY 42743

PS For ...ructions

NOTICE OF APPLICATION

Horseshoe Bend Solar, LLC, is proposing to construct and operate a 60-megawatt AC solar energy project located at approximately 1648 KY 218, Greensburg, KY 42743, Green County, Kentucky. The proposed Horseshoe Bend Solar Project will consist of up to 550 acres of solar photovoltaic panels and associated racking, inverters, DC-coupled energy storage system, and a project substation transformer.

Horseshoe Bend Solar, LLC is required to file an application for construction and operation of the proposed facility. This application is subject to the approval of the Kentucky State Siting Board on Electric Generation and Transmission Siting, which can be reached at P.O. Box 615, 211 Sower Boulevard, Frankfort, Kentucky 40602-0615, or via phone at (502) 564-3940.

A person who wishes to become a party to a proceeding before the board may, by written motion filed no later than thirty (30) days after the application has been submitted, request leave to intervene.

A party may, upon written motion filed no later than thirty (30) days after an application has been filed, request the board to schedule an evidentiary hearing at the offices of the Public Service Commission, 211 Sower Boulevard, Frankfort, Kentucky 40602-0615.

A request for a local public hearing or local public information meeting shall be made by at least three (3) interested persons who reside in the county or municipal corporation in which the pipeline, plant, or transmission line is proposed to be located. The request shall be made in writing and shall be filed within thirty (30) days following the filing of a completed application.

Any questions related to the application or its process may be directed to the Kentucky State Siting Board, which can be reached at P.O. Box 615, 211 Sower Boulevard, Frankfort, Kentucky 40602-0615, or via phone at (502) 564-3940.

Green County Farm Bureau receives award

Green County Farm Bureau was recognized during the 101st Kentucky Farm Bureau (KFB) annual meeting in Louisville for its outstanding membership and program achievement in 2020. The award honors county Farm Bureau offices that meet the company's profitability requirements and whose insurance policy growth meets or exceeds its annual growth goal.

Tony Skaggs

Tony Skaggs, President of Green County Farm Bureau, was acknowledged as the award recipient by Mark Haney, President of Kentucky Farm Bureau, John Sparrow, Executive Vice President and CEO of KFB Insurance, and Drew Graham, Executive Vice President of the KFB Federation, during a portion of the general session on December 4.

Recognized for the achievements of its Women's Program this year, Green County Farm Bureau received the 2020 Gold Star Award of Excellence from Kentucky Farm Bureau.

The award honors the county Women's Committee for its active participation in Farm Bureau leadership development programs, state competitions, and educational or promotional initiatives.

Sundown Clark chairs the Green County Farm Bureau Women's Committee.

Additionally, recognized for the achievements of its Young Farm Program this year, Green County received the 2020 Gold Star Award of Excellence from Kentucky Farm Bureau. The award honors a county's Young Farmer Committee for its active participation in Farm Bureau leadership development programs, state competitions, and educational or promotional initiatives.

Erin Arnett chairs the Green County Farm Bureau Young Farmer Committee.

Kentucky Farm Bureau is the state's largest general farm organization with more than 460,000 member families. For more news and updates from Kentucky Farm Bureau, visit KYFB-Newsroom.com.

Time to pay SVFD fire dues

MARILYN MILBY
S-VILLE FIRE DEPT.

It is time to pay the annual membership dues for the Summersville Fire Department.

The dues to have your property covered are $40. Any additional properties not joining the property of residence will be $10.

Those who took a life-time membership will not owe anything, and will have the same coverage as in previous years.

Anyone living North of Pittman Creek and Green River to the county line is considered to be under the jurisdiction of the Summersville Fire Dept.

Dues can be paid in person at the main branch of the Forcht Bank or can be mailed in.

For those who are current members, a notification will be sent through the postal service. Anyone who has moved into the SVFD district and does not currently have their property covered, is urged to do so.

For additional questions or concerns please feel free to contact Chief David R. Milby on his cell, 270-932-1573, or on his home phone 270-932-5013.

SVFD board election and banquet dates announced

MARILYN MILBY
S-VILLE FIRE DEPT.

The Summersville Fire Department annual board member election will be held January 9, 2021 at the Summersville Fire Department building on Hwy. 61 North.

The meeting begins at 10 a.m. CT. This meeting is open to the public.

For any additional information please contact SVFD Chief David R. Milby at 270-932-1573.

The Summersville Fire Department Awards Banquet will be held March 6, 2021 at 5 p.m. CT.

Normally this is held in the evening on the same day as the board member election, but due to the COVID 19 virus this is being delayed.

It is our intention to keep everyone as safe as possible and we are hoping the vaccinations have arrived and the pandemic numbers are much better by March.

We encourage all SVFD personnel and their families to be in attendance for this gathering.

A potluck meal will be held with meat, drinks and bread furnished.

We will also celebrate the accomplishments of 2020 and recognize those who have gone above the call of duty in a special awards ceremony after the meal.

It will be a time of fellowship and much deserved relaxation and I hope all are looking forward to a time of sharing.

NOTICE OF APPLICATION

Horseshoe Bend Solar, LLC, is proposing to construct and operate a 60-megawatt AC solar energy project located at approximately 1648 KY 218, Greensburg, KY 42743, Green County, Kentucky. The proposed Horseshoe Bend Solar Project will consist of up to 550 acres of solar photovoltaic panels and associated racking, inverters, DC-coupled energy storage system, and a project substation transformer.

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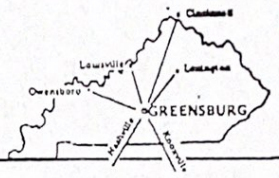
Any questions related to the application or its process may be directed to the Kentucky State Siting Board, which can be reached at P.O. Box 615, 211 Sower Boulevard, Frankfort, Kentucky 40602-0615, or via phone at (502) 564-3940.

To donate to the local food pantry, send a check to:
Green County Ministerial Association
P.O. Box 124
Greensburg, Ky., 42743

In Kentucky, 662,000 people struggle with hunger and may not know where they will find their next meal.
That number includes on in every five kids who may not have enough to eat.
Kentucky has the highest rate in the nation of food insecurity among adults ages 50-59.
Nationally, the food insecurity rate among adults ages 50-59 is 10.6% while in Kentucky that rate is 17.3%.

Greensburg
Record-Herald
P.O Box 130 Greensburg, KY 42743 (270) 932-4381 or 932-4441 Walt Gorin, Publisher



AFFIDAVIT OF PUBLICATION

Before me, a Notary Public, personally appeared Anne Gorin, who certifies that any and all advertising material for Horseshoe Bend Solar appeared in the *Greensburg Record-Herald* on the date(s): 12-9-20.

Anne Gorin
Signature

Office Manager
Title

State of Kentucky
County of Green

Sworn to and subscribed before me on the 9th day of Dec, 20 20.

Darla Decker
Notary Public

11-9-23
My Commission Expires

Attachment C

Letter from Green County Judge

Executive John Frank

John H. Frank

Green County Judge-Executive
203 West Court Street
Greensburg, KY 42743
Phone: (270) 932-4024 • Fax: (270) 932-3635
johnfrank.cje@hotmail.com

Horseshoe Bend Solar, LLC
c/o Carolina Solar Energy
400 W Main St., Suite 503
Durham, NC 27701

RE: Green County Solar Project

Dear Ms. Harkrader:

This is to confirm that Green County has no planning and zoning ordinance or jurisdiction, and no noise ordinance, applicable to the proposed Horseshoe Bend Solar project to be located here.

Very truly yours,

John H. Frank
Green County Judge-Executive

Attachment D

Certificate of Compliance

KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION

HORSESHOE BEND SOLAR, LLC
CASE NO. 2020-00190

STATEMENT REGARDING CERTIFICATION REQUIRED BY KRS 728.706(2)(d)

Comes the undersigned and states as follows:

1. That my name is Carson Harkrader and I am the CEO of Horseshoe Bend Solar, LLC, the Applicant herein;

2. That I am over 18 years of age and I am a resident of the State of North Carolina;

3. That I have conducted an inquiry into the facts contained in this Statement and believe them to be true to the best of my knowledge;

4. That the proposed facility as planned will be in compliance with any and all local ordinances and regulations concerning noise control, and will also be in compliance with any and all applicable local planning and zoning ordinances as provided in KRS 278.704(3);

5. There are no setback requirements established by the planning and zoning commission for land located in Green County, including Horseshoe Bend's project area.

Signed this 14th day of December, 2020.

CARSON HARKRADER

Attachment E

Public Involvement Activities

Horseshoe Bend Project (Green County, KY)
Description of Public Involvement Activities (KRS 278.706(2)(f))

Horseshoe Bend Solar, LLC, through its parent Carolina Solar Energy III, LLC (collectively, **"Carolina Solar"**), has made a substantial effort to engage the public in numerous ways regarding its proposed solar project in Green County (the **"Horseshoe Bend Project"**). The following is a description of the public involvement activities undertaken prior to the submission of this Application. Carolina Solar will continue these efforts and will participate in any public notice, comment and hearings which may be initiated as part of the Siting Board permit process.

- On numerous occasions from September, 2019, through the date of this Application, representatives of Carolina Solar have met in Greensburg, KY, with **John Frank, Green County Judge-Executive**, to discuss the Horseshoe Bend Project.
- On October 28, 2019, Solomon Van Meter, Community Representative for Carolina Solar, and Chris Jones, Manager of Project Development for Carolina Solar, met with the Director and faculty members of the **Conn Center for Renewable Energy Research at the J.B. Speed School of Engineering, University of Louisville**, to discuss various solar projects, including the Horseshoe Bend Project.
- On October 29, 2019, Carolina Solar supported a day-long Utility Scale Solar *Workshop for Public Officials* at the Marion County Public Library, Lebanon, KY (announcement/agenda attached). The workshop was attended by approximately thirty (30) public officials from various Kentucky counties in which solar power generation projects have been proposed, including **John Frank, Green County Judge-Executive, Sean Curry, Green County Property Valuation Administrator, Charles Judd, Green County Fiscal Court Magistrate for District #5 (magisterial district where project will be located), and Jordan Turner, Principal of the Green County Area Technical Center**. The workshop featured presentations on topics including environmental health & safety, property values, land leasing, and economic benefits to hosting counties, as well as informal meetings between representatives of Carolina Solar and these Garrard County officials. Carson Harkrader, CEO of Carolina Solar, presented in one of the educational segments of the workshop.
- On February 24, 2020, Solomon Van Meter, Community Representative for Carolina Solar, met in Greensburg, KY, with **Jordan Turner, Principal of the Green County Area Technical Center** to discuss the Horseshoe Bend project and workforce development.
- On February 12 & 13, 2020, representatives of Carolina Solar, including Carson Harkrader, CEO, met in Frankfort, KY, with **various members of the Kentucky Legislature, including Sen. David P. Givens (Senate District 9 and President Pro Tempore of Senate), and**

Rep. Brandon Reed (House District 24), whose districts include the Horseshoe Bend Project, and discussed the project.

- On March 9, 2020, Solomon Van Meter, Community Representative for Carolina Solar, spoke with **Laura Johnson of the Green County Library** about the Horseshoe Bend project and the genealogy of the cemetery located on D.A.R. Cemetery Road near the Horseshoe Bend project.
- In May 2020, Carolina Solar contacted **Jan George at the Green County Food Pantry** with regard to assistance with relief related to COVID-19.
- In June 2020 (and ongoing) representatives of **Dinsmore & Shohl LLP** have contacted **John Frank, Green County Judge Executive** and other members of Green County government on behalf of Carolina Solar to discuss a proposed Industrial Revenue Bond and associated Payment in Lieu of Taxes (PILOT) agreement for the Horseshoe Bend project. Those discussions are ongoing.
- On June 26, 2020, Solomon Van Meter, Community Representative for Carolina Solar, met in Pierce, KY, with **Anthony Meadows, a landowner adjacent to the project,** to discuss the Horseshoe Bend project.
- On July 10, 2020, Solomon Van Meter, Community Representative for Carolina Solar, met in Campbellsville, KY, with **several residents of Green County, including Scott Curry, Matt Weddle, Charlie Houk and Ryan Jewell** to discuss the Horseshoe Bend Project. This impromptu meeting occurred while Solomon Van Meter was in the area taking photos for the project video.
- On July 10, 2020, Solomon Van Meter, Community Representative for Carolina Solar, spoke with **Adam Davis, an adjacent landowner to the project,** about the Horseshoe Bend Project, and answered questions.
- On July 16, 2020, Carolina Solar hosted a **public meeting** about the Horseshoe Bend Project. The meeting was advertised in the Greensburg Record-Herald, and invitation letters were sent to all immediately adjacent landowners. The meeting took place on Zoom and was also projected onto a screen for in-person attendees at the Greensburg Community and Senior Center. The meeting featured formal presentations by Carson Harkrader, CEO of Carolina Solar, Chris Jones, Manager of Project Development of Carolina Solar, a consulting electrical engineer, and a real estate appraiser. Attendees were shown and invited to inspect enlarged satellite images showing the exact location of the proposed solar array. The meeting afforded attendees the opportunity to ask questions of the presenters.
- On September 9, 2020, representatives of Carolina Solar, including Carson Harkrader, CEO, met virtually with **members of the Kentucky Agriculture Commissioner's staff (Tim Hughes, Gus Hebert and Keith Rogers)**, regarding the Horseshoe Bend Project and other projects.

Attachment F

Public Meeting Documentation

STURGILL TURNER

Sturgill, Turner, Barker & Moloney, PLLC
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Lexington, KY 40507
p: 859.255.8581 f: 859.231.0851
www.sturgillturner.com

James W. Gardner
Of Counsel
jgardner@sturgillturner.com

July 9, 2020

Kentucky State Board on Electric Generation and Transmission Siting
Kentucky Public Service Commission
211 Sower Boulevard
P. O. Box 615
Frankfort, KY 40602

Re: Horseshoe Bend Solar, LLC
Case No. 2020-00190

To Whom It May Concern:

In its Motion to Approve the Form of its Public Meeting, Horseshoe Bend Solar, LLC, indicated that a public meeting would be held on at the Green County Fiscal Courtroom on July 16, 2020. Please be advised that the public meeting location has changed to the Greensburg Community and Senior Center, 110 North 1st Street (next to the library), Greensburg, KY 42743. This change does not impact the Applicant's motion or the Siting Board's order granting the motion issued on June 23, 2020. Applicant will still comply with the ordering paragraphs set forth therein.

Ten paper copies of this letter shall be filed in the office of the Kentucky State Board on Electric Generation and Transmission Siting, 211 Sower Blvd., Frankfort, Kentucky 40601 on request or within 30 day after the state of emergency is lifted, which is consistent with the findings in Public Service Commission Case No. 2020-00085.

Very truly yours,
STURGILL, TURNER, BARKER & MOLONEY, PLLC

James W. Gardner

James W. Gardner
M. Todd Osterloh
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PUBLIC NOTICE

Horseshoe Bend Solar, LLC, is proposing to construct and operate a solar energy project in Green County, Kentucky. The proposed Horseshoe Bend Solar Project will be located on approximately 550 acres to the South of KY-218, set back from Jim Meadows Road, approximately 10 miles Southwest of Greensburg. A public meeting to inform the community about the project will take place on Thursday, July 16, 2020 at 5:30PM Central (6:30PM EDT).

In order to comply with current guidelines for social distancing, the public meeting and information about the project will be accessible as follows:

(1) All representatives and experts from Horseshoe Bend Solar, LLC making presentations at the public meeting will do so via a Zoom online meeting.
(2) Members of the public will be able to view the public meeting live, on-line on Zoom, without cost, by registering with a valid email address at http://solar-projects.net/greencountysolar. Participants will be able to ask questions either orally or in writing at the end of the presentation.
(3) Members of the public are strongly encouraged to participate via the online meeting. The public meeting will also be projected for viewing at the Greensburg Community and Senior Center, 110 North 1st Street (next to the library), Greensburg, KY at which a representative of Horseshoe Bend Solar, LLC will be present and a mechanism will be provided for any in-person attendees to ask questions. In-person attendance at the public meeting will be consistent with guidelines and directives from the CDC and the Office of the Governor in effect at the time of the meeting, including, but not limited to, social distancing and the requirement that masks be properly worn at all times. In order to allow for social distancing, the number of attendees at the in-person meeting will be limited and spaces allocated to the public on a first-come, first-served basis. To sign up for a space at the in-person meeting please email info@carolinasolarenergy.com or call (984) 260-8038.
(4) A large-scale layout map of the proposed project will be available to the public for review in the entrance to the Green County Courthouse at 203 West Court Street Greensburg, KY for the three business days prior to the public meeting.
(5) Information about the proposed project is also available online at https://www.carolinasolarenergy.com/projects-in-development-source/horseshoe-bend

The proposed photovoltaic solar project will consist of solar panels installed on racks with an approximate maximum height of 15 feet, inverters, transformers, an energy storage system, associated wiring and balance of system, and a substation. The power generated by the project will be linked to the electric transmission grid via the existing transmission easement that crosses the property. The project will install a visual vegetative buffer along portions of the perimeter of the project that will be comprised of two staggered rows of native, evergreen plantings.

Anyone with questions about the July 16th public meeting or the Horseshoe Bend Solar Project may request information by emailing info@carolinasolarenergy.com or calling (984) 260-8038.

Greensburg-Green County
A proud past — A promising future

Way Back When

By Carol Dial
SPECIAL TO THE R-H

July 7, 2010

One homeless person - A recent survey found one homeless person and sixty-three at risk people in Green County.

Ellis records in Nashville - Local singer, nineteen-year-old Hannah Ellis, has been cutting records in Nashville.

Fourth of July celebration - Several Green County residents attended and participated in the Campbellsville Fourth of July Parade.

VFW Post receives award - At the VFW State Convention in Louisville, the James L. Pruitt VFW Post #5813 received an award from the National Military Services for donations made.

July 5, 2000

County receives grant - Green County has received a $500,000 grant from the 21st Century Center to provide organized after school activities for middle school students.

Roy joins Record-Herald staff - Bekki Roy has joined the Record-Herald as a staff writer and photographer.

Bike winners - Chelsea Baker, Hayli Baker and Josh Rowley won free bikes at Kid's Day at the Green County Fair.

Two injured - Mary C. York and Brandon York received injuries when their vehicle crashed into the back of a truck that was stalled on Russell Creek Hill.

July 4, 1990

County poultry production - State Agriculture Commissioner Ward Burnett met with farmers to discuss poultry production in the county. There are currently 35 producers in Green County.

Fair a success - Over 10,000 people paid admission to enter the Green County Fair. The Hawkeye helicopter ride around Greensburg was a popular event with 200 people taking the trip.

Farm award - The Cleanest and Greenest Farm Award went to Christine Pickett.

Martin crowned - Billy Rae Martin was crowned the 1990 Miss Green County Fair.

July 3, 1980

Bogus bill passed - A counterfeit $20 bill was included in the bank deposit of a local business. It is thought to have been passed by a customer from the carnival.

Water tower completed - A new water tower over 100 feet tall has been completed at Ebenezer.

Antique car owners take trip - Several local antique car enthusiasts drove their cars to Harrodsburg over the weekend.

Little Barren, Ria Ledbetter - The last two days have been the hottest of the season with temperatures 90 and 92 degrees.

July 9, 1970

Barn fire - The barn of Shively Landis in the Fry community was struck by lightning. The structure and contents were destroyed.

Stripped cars found - Two 1966 Pontiac GTO automobiles were found near the Wards community. Both cars had been stripped.

Walker hit by truck - Homer Walker was hit while crossing the street by a truck driven by Stewart Coakley.

Meets Reds pitcher - Melvin Houk was thrilled to meet and have his picture taken with Jim McGlocklin, pitcher for the Cincinnati Reds.

July 8, 1960

KU office here - Kentucky Utilities Company will open an office in Greensburg in early fall.

Record cattle show - The largest Beef Cattle Show ever held in this section of Kentucky was held at the Green County Fair this year. Over eighty head of purebred Angus and Herford cattle were shown at the fair.

Barber retires - Local barber L.L. McAlister has sold his business to Roy C. Scott. Scottie's Barber Shop is open in the Elizabeth Hotel.

Miss Green County - Patty Mudd was crowned Miss Green County of 1960.

USDA

From page 1B

requirement for high schools to provide students the option to select some of the foods offered in a meal. While this practice, known as "offer versus serve" is encouraged, social distancing or meals-in-the-classroom models would make this regulatory requirement difficult. Collectively, these waivers reduce barriers to meal service options that support a transition back to normal operations while simultaneously responding to evolving local conditions.

The following nationwide waivers will remain in effect through June 30, 2021 for the SBP, NSLP, and CACFP. These flexibilities allow for:

Meals that do not meet normal meal pattern requirements when necessary to keep kids fed;

Meals to be served outside of group settings and outside of standard times to facilitate grab-and-go and other alternate service options; and

Parent/guardian pick-up of meals for students participating in distance learning.

The new waiver applies to the NSLP's "offer versus serve" requirement for high schools, which would be difficult to execute while maintaining social distancing, particularly if meals are prepackaged for in-classroom or grab-and-go service.

FNS previously extended numerous waivers through the summer months to give summer program operators the continued flexibility they need to leverage innovative solutions in support of social distancing – such as delivery and grab n' go – without interruption. These waivers ensure all children can access free meals throughout the summer. Families can use FNS's Meals for Kids interactive site finder to locate free meals for children ages 18 and under this summer at 67,000 sites across the nation.

These actions are part of USDA's focus on service during the COVID-19 outbreak. To learn more about FNS's response to COVID-19, visit www.fns.usda.gov/coronavirus.

FNS administers 15 nutrition assistance programs that leverage American's agricultural abundance to ensure children and low-income individuals and families have nutritious food to eat.

McConnell: Nation Must Work Together to "Stay on Offense Against the Virus""

WASHINGTON, D.C. – U.S. Senate Majority Leader Mitch McConnell (R-KY) delivered the following remarks today on the Senate floor regarding COVID-19:

"Each time I've returned home over the last several weeks, I've had the honor of traveling to different Kentucky hospitals to safely meet with healthcare professionals, thank them for their incredible work, and listen to what's on their minds.

"For more than three months now, our nation's doctors, nurses, and health professionals have been fighting day and night to heal the American people strangers and protect our nation. I said in mid-March that our country was about to meet a lot of new heroes, and that among them would be many people "who wear scrubs…who rush toward the sick, and wash their hands until they bleed."

"Well, Americans and families from coast to the coast have met just such heroes.

"The front-line professionals I'm meeting are proud to do their work. And you'd better believe they are appreciative that the sacrifices and the smart precautions taken by stopped health systems from being overrun in the springtime; allowed them to continue giving each patient the care they deserve; and bought our country time to plan a smart, safe, and gradual reopening.

"Until we have a safe and effective vaccine, it will remain all of our jobs as American citizens to help our nation settle into a middle ground between unsustainable emergency lock-downs and our ordinary life from before all this.

"In short: We cannot go back to April, and we cannot go right back to normal. We need new routines, new rhythms, and new strategies for this new middle ground in between.

"It's the task of each family, each small business, each employer, and all levels of government to apply common sense and make this happen.

"To name just one example: We must have no stigma, none, about wearing masks when we leave our homes and come near other people. Wearing simple face coverings is not about protecting ourselves, it is about protecting everyone we encounter.

"In fact, the more we hate the pain and suffering that accompanied the strict stay-home guidelines a few months ago, the happier we should be to take reasonable small steps every day to ensure our country can stay on offense against the virus.

"Now, the Senate should take pride in the degree to which our historic response has helped the country get where we are.

"All of the health leaders and professionals I meet continue to be glad for the CARES Act, the historic, bipartisan legislation that Senate Republicans wrote and then negotiated across the aisle.

"We sent historic resources to hospitals and health providers to help them do their healing work and fight this new invader.

"That was in addition to the historic relief we provided to households and small businesses, which economists across the political spectrum say saved millions of jobs and prevented an economic free-fall.

"In May and June, while the Democratic-led House has been

See McConnell, page 4B

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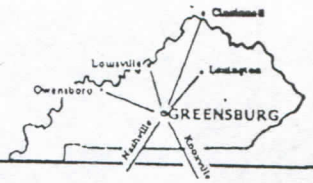
Greensburg
Record-Herald
P.O Box 130 Greensburg, KY 42743 (270) 932-4381 or 932-4441 Walt Gorin, Publisher



AFFIDAVIT OF PUBLICATION

Before me, a Notary Public, personally appeared Anne Gorin, who certifies that any and all advertising material for Horseshoe Bend Solar appeared in the *Greensburg Record-Herald* on the date(s): July 1, 2020.

Anne Gorin
Signature

Office Manager
Title

State of Kentucky
County of Green

Sworn to and subscribed before me on the 7 day of July, 2020.

Jacqueline S Conner
Notary Public

09-08-21
My Commission Expires

400 West Main, Suite 503 Durham, NC 27701
919-682-6822 www.carolinasolarenergy.com

Name
Add1
Add2

June 26, 2020

Re: Horseshoe Bend Solar Farm – Invitation to Public Meeting

Dear Name,

I'm writing to invite you to a public meeting that our company is hosting for the solar project that you are a part of! We are hosting the public meeting in order to meet the neighbors of the project and members of the public, share information about the solar project, and provide a platform to answer questions from the community.

The meeting will be held at 5:30pm Central (6:30pm EDT) on July 16, 2020. In order to help us adhere to CDC guidelines on social distancing, attendees are strongly encouraged to attend the meeting remotely via video link, by registering at the link shown on the next page. You will need an email address in order to register and login to the meeting, and you will be able to ask questions verbally or in writing live at the end of the meeting. The meeting will also be broadcast in the 2nd floor courtroom at the Greensburg Community and Senior Center, 110 North 1st Street (next to the library), Greensburg, KY 42743. A limited number of spaces are available to attend the broadcast in-person, which will be subject to CDC guidelines on the wearing of masks and social distancing. If you would like to attend in person, please sign up by contacting Tyler Caron at the contact information on the next page. All of our presenters will participate remotely.

If you would like to see a map of the solar project, a large printed map of the proposed layout will be posted in the lobby of the Green County Courthouse for the 3 business days prior to the public meeting (July 13-15, 2020).

During the public meeting we will show a video with information on the project, our company, solar energy technology, real estate property value analysis, and health and safety information. You can also watch the video any time after July 13th by accessing it from our website at https://www.carolinasolarenergy.com/projects-in-development-source/horseshoe-bend.[1] There you will see a link to watch the video, as well as the layout map and additional information about the project.

[1] (You can also access the page by visiting www.carolinasolarenergy.com, clicking on our "Projects" page, scrolling down to the bottom, and clicking on the Horseshoe Bend project.)

400 West Main, Suite 503 Durham, NC 27701
919-682-6822 www.carolinasolarenergy.com

We look forward to seeing you virtually at the public meeting!

Sincerely,

Carson Harkrader
CEO

To attend the July 16th online Zoom public meeting, please register at:

http://solar-projects.net/greencountysolar

To attend the July 16th in-person broadcast of the public meeting at the Green County Fiscal Court (limited spaces available):

Please call Tyler Caron at (984) 260-8038 or email info@carolinasolarenergy.com.

400 West Main, Suite 503 Durham, NC 27701
919-682-6822 www.carolinasolarenergy.com

Horseshoe Bend Solar Fact Sheet

Horseshoe Bend Solar is a new proposed solar energy facility planned to the South of Highway 218, set back from Jim Meadows Road, approximately 10 miles Southwest of Greensburg, in Green County Kentucky. This 60MW facility will generate enough electricity to power approximately 15,000 homes.

The solar technology used is photovoltaic, and the solar panels sit on racks that are up to 15 feet tall that rotate once per day on a North-South axis to track the sun throughout the day. The project will not generate any emissions, and there is no noise audible outside of the project boundary. A battery storage system will be connected to the facility to store electricity generated during the day for delivery to the grid at other times. The solar farm will be set back from property lines and a vegetative buffer will be planted in areas to help screen the facility from sight. The footprint of the facility is approximately 550 acres. Grass will be maintained under the panels with minimal amounts of concrete or gravel used throughout the facility. The facility will be surrounded by a locked security fence.

The solar farm will pay significant county taxes over the course of the project lifetime, with little to no expenditure from the county. The project will generate hundreds of construction jobs for approximately 1 year, as well as a handful of long-term maintenance and landscaping positions. The solar farm will not impact local electricity rates.

Horseshoe Bend Solar will include a strip of native pollinator plantings and pollinator trees in sections of the vegetative buffer.

Real estate appraisers have completed many matched-pair analyses on residential homes adjacent to solar farms. These matched-pair analyses compare the value of homes before and after the construction of a solar farm, and show that the construction of a solar farm has no discernable impact on the sales price of surrounding homes. A report from a Kentucky licensed professional appraiser detailing this analysis for Horseshoe Bend Solar is available on our website and on request.

Courts | B1

Q & A

Circuit Court provides info for Covid procedures

Future | 5A

Entrepreneur

Local student broadens farming endeavors through program

Visit the *Record-Herald* at www.record-herald.com

50 Cents

Greensburg Record-Herald

Serving Green County Since 1895 | 2 Sections, 14 Pages | No. 29 | Wednesday, July 22, 2020

Showing Patriotism

Photo by Clevis Jeffries

The "Stars and Stripes" currently flies in the breeze high in the air at the residence of Robert and Faye Conley on Grab Road. Their son, Todd, put up the flag prior to Independence Day.

Cow Days '20 is canceled

By Crystal Cecil
R-H Staff

Meeting in regular session yesterday, the Greensburg Rotary Club made the decision to cancel Cow Days for 2020.

Rotary President Steve Curry isn't happy, but said it is what needs to be done.

"Due to health department guidelines, we would have had to present a letter to the governor, get it okayed to have Cow Days, ALL vendors would have to be tested prior to setting up, and we, as Rotary Club, would have to set up hand sanitizing stations," Curry said.

"There's no time. And with the governor declaring 10 people or less gatherings at this time, it is just impossible being within 60 days," Curry said.

"We hate it for the community, but safety is important."

Marion County recently announced the decision to cancel Ham Days, another popular festival, held annually in Lebanon the weekend after Cow Days.

Main Street to boast love, friendship and kindness

By Crystal Cecil
R-H Staff

A Unity Parade will be held Saturday, July 25 from 6 to 8 p.m. CT on Main Street in Greensburg.

Greensburg native and organizer Troy Shively invites the community to attend the parade, which will stand against bigotry, hatred and violence, by coming together with love, friendship and kindness.

"It is our goal to show our love and support for the youth in our community and all other communities, in their efforts to make the world a better place," Shively said.

"We are stronger together as one and silence is not an option anymore."

The flyer, which has been circulating on social media over the past few weeks, invites everyone to support the youth in the community, of all creeds and backgrounds.

Cheatham is EMS director

By Clevis Jeffries
Staff Writer

Nick Cheatham

Nick Cheatham will become the new Green County Ambulance Service director effective August 1, succeeding Greg Whitlow, who is retiring.

Cheatham's tenure with emergency medical services spans a total of 24 years, serving the local community since 1996.

During his time with the Green County Ambulance Service, he was promoted to Captain in 2001.

Cheatham holds certifications in EMT, CPR, NIMS, and Drivers Training.

He also has additional certifications, including Firefighter levels 150 and 400, Basic Coroner Death Investigation, and Basic Search and Rescue Training.

The future EMS director has served as Green County Rescue Squad Chief since 2011 and Greensburg-Green County Fire and Rescue Captain since 2006.

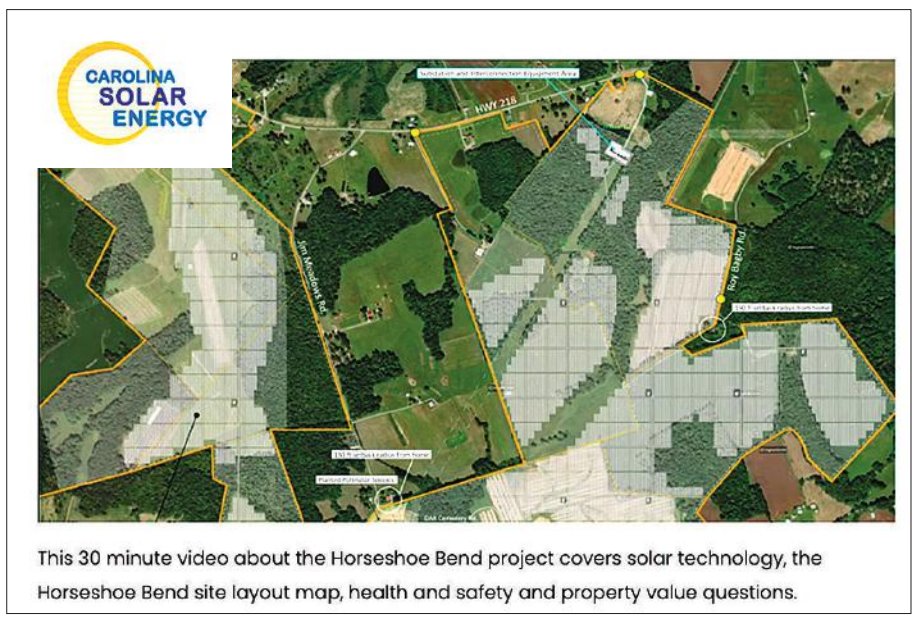
On accepting the position as EMS director, Cheatham said, "I would like to thank the EMS Board of Directors for giving me the opportunity to serve as its director. The local EMS staff and I want to continue providing quality care to the community in their time of need."

Carolina Solar Energy has big plans for Horsehoe Bend

By Dale Curry
R-H Staff

Carolina Solar Energy hosted an in-person meeting along with a zoom meeting Thursday to inform the community about their plans to build a solar farm in Green County.

Plans for the farm, called Horseshoe Bend, will be located near the Exie community of Green County, near the corner of Hwy 218 and Jim Meadows Road on approximately 550 acres. The company hopes the farm will be completed and operational in 2023.



This 30 minute video about the Horseshoe Bend project covers solar technology, the Horseshoe Bend site layout map, health and safety and property value questions.

A video shown at Thursday's meeting, along with details about Carolina Solar Energy and their various projects, including Horseshoe Bend, are available on the company's website, carolinasolarenergy.com.

The meeting Thursday night was primarily for neighbors of the planned solar farm, as well as any other community members who may have questions about the plans.

Carolina Solar Energy originated in Durham, N.C., but is now spreading into a few projects in Virginia and Kentucky, including farms in Garrard County and Metcalfe County in addition to the Green County project.

During the meeting, three people spoke through a zoom meeting, about the planned project.

Chris Jones, manager of Project Development for Carolina Solar Energy, explained how a solar farm works, emphasizing that the company is "here to be a good neighbor."

Chris Sandifer, an electrical engineer, talked about the safety of solar panels, mentioning that the panels are recyclable if they were to be damaged in any way.

See **Solar**, page 10A

Mississippi: Walking with God in the Garden

Mississippi attraction takes lesser traveled path

Millstones
Tom Mills
R-H News

I've never been to the holy land, but as I sat last Tuesday on a stone bench deep in the southern Mississippi woods, looking across a replica of the Mount of Olives at the Temple of Herod in ancient Jerusalem, I couldn't help believe that if I were really in the Middle East it couldn't be any hotter, no matter if that heat was fervor brought about by the Spirit of God or by the sort of humidity that slaps you in the face and says, "Okay, Kentucky boy, you thought summers were hot back home, but down here we get Biblical."

The heat was stoked by the passion with which Don Bradley was speaking about the model of the holy land which we were touring and the Biblical events which took place at each location.

Bradley, whose flowing hair and Old Testament beard summons images of John the Baptist in the wilderness proclaiming the coming Kingdom, is owner and tour guide of Palestine Gardens, a replica of the holy land near Lucedale, Mississippi.

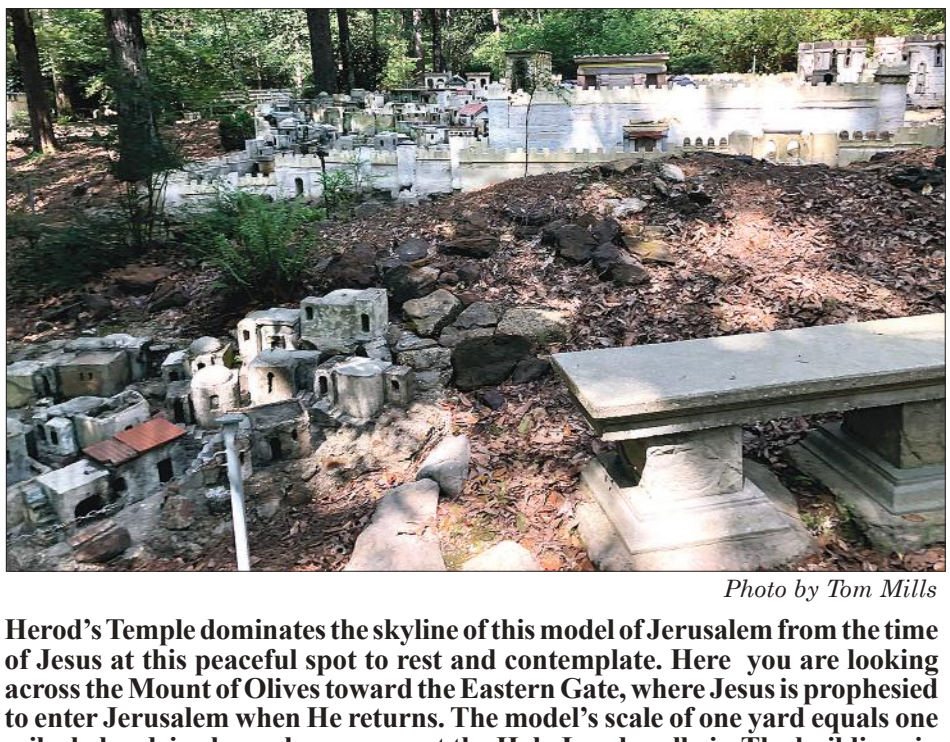


Photo by Tom Mills

Herod's Temple dominates the skyline of this model of Jerusalem from the time of Jesus at this peaceful spot to rest and contemplate. Here you are looking across the Mount of Olives toward the Eastern Gate, where Jesus is prophesied to enter Jerusalem when He returns. The model's scale of one yard equals one mile, helps drive home how compact the Holy Land really is. The buildings in the lower left are no part of Jeruslem, but represent Bethphage, where Jesus sent the disciples to get the colt on which he would ride into Jerusalem.

"Visitors come from all seven continents to visit in the rural Mississippi woods and experience a time and events that continue to impact the world," Bradley said. "I've even had a scientist come whose legal residence was Antarctica because he was stationed there for six months and one day."

See **Temple**, page 10A

Temple

From page 1A

In a world of rampant commercialism, where even the Bible is marketed to extract every last dollar, Palestine Gardens is different. No admission is charged at the scale model of the holy land constructed between 1953 in 1960 by Rev. Walter Harvell Jackson and his wife Pellerree, near Lucedale, Mississippi.

The couple conceived the idea in 1930 while in seminary. It took a 16-year search for the right topography before building of the miniature cities, villages, mountains, and seas began. Constructed at a scale of one yard qualms one mile, the topography reflects the actual lie of the land. The tour starts at the Jordan River near the Dead Sea, which is even more appropriately named because an alligator has taken up residence.

The journey to Jerusalem is up a steep incline, reflecting the change in elevation in the 20 or so miles between those points as you pass models of Jericho and Bethlehem. Beyond Jerusalem, the tour continues through Samaria, into Galilee, skirting the sea where so much of Jesus' ministry took place, and onward toward Cesarea Phillipi.

Bradley says the terrain, including Sea of Galilee, Jordan River, and valleys and mountains, are uniquely represented to give you living map.

"The quarter mile walk has taken a life time to develop (and) our mission is 'That others may know that they can have eternal life,'" he said. "There is something for all ages, and regardless of level of knowledge of the Bible or religious beliefs."

Bradley said the Gardens is growing and new sites are added as time permits.

Phots by Tom Mills

Owner and tour guide Don Bradley relates a story from the Bible to David and Linda Hinton and their dog, Marley, during a tour last week of Palestine Gardens near Lucedale, Miss. Not as commercial as many other religious attractions, Palestine Gardens is located down a country road about six miles from the highway. It may be one of those rare places you either have to be really looking for, be sent there or have it find you. Once you are there, though, the experience is likely to be profound.

Palestine Gardens is open seasonally. Owner Don Bradley does outreach programs during the winter, but he says if you happen to show up offseason and he is home, you will likely get a tour.

"The 1960s style of folk art by Rev. Jackson has been maintained with a major restoration project started in 2008," he said. "There are some remaining original cities, but a major restoration was required and additions made. The same folk art style was maintained but included more detailed artistic work."

Bradley, who lives on site with his wife, Cindy, and the ambassador, their one-eyed dog, URI, leads every tour.

In 1994, he said God told him he had seven days to go buy the attraction.

"I became a Christian in 1991 at the age of 33, so there is hope even for us older people" he said. "I found out this place was still open and our whole church came because they got excited about it."

Bradley said he saw the Hand of God in every bit of it and asked the Lord for a similar ministry, if it was His will.

"I thought he might send me out to Carlsbad, N.M. or Las Vegas, somewhere I've lived out west," he said. "After three years of praying I had pretty much given it up, but it was always in the back of my mind. Then one day, he spoke to me, audibly, to go up to Palestine Gardens, ask them if they would be willing to sell it, and do it within seven days."

Bradley balked, because he feared having his overture rejected.

"I said, 'No, Lord, I'm not going,'" he said. "Now, how do you say *no* and *Lord* in the same breath? The next seven days, were the longest in my life."

On the seventh day, he said God spoke again, telling him to go now. He wasn't about to refuse again.

"I get up here and a young lady named Janice stars me on a tour," he said. "We get down to the Jordan River and God says, 'I didn't send you here for a tour.' I interrupted her in mid-sentence and asked he if the owners were around."

They were preparing to leave within minutes for Mobile, Ala., he learned, so he told her his mission.

"Her eyes got as big as saucers and she said, 'Come with me,'" he said.

The owners had been praying someone would take over the mission.

"I know God sent me here," Bradley said. "If you can read God's word and let Him speak to you that way it's so much better, but if he speaks to you directly it may be because your faith is so little he has to speak to you."

•••

On the way back to Greensburg, I visited two more well-known Christian attractions — Ave Maria Gardens in Cullman, Ala., which features folk art miniatures as well, and Christ in the Smokies in Gatlinburg. Tenn. Both are well-done attractions and serve God in their ministry Both are more commercial and charge admission to help provide more comfort amenities for visitors, including air-conditioned gift shops at the exit.

But darn it, if I didn't feel the presence of God most strongly on a dirt path hacked through a patch of Mississippi woods where you don't even notice the oppressive heat and humidity as you enter a model of a world that is, for Christians, the most important place on earth.

Solar

From page 1A

He also mentioned that a solar farm produces no dust, no smells, no audible noise and that there is very little traffic in the area after the construction phase is completed.

The construction phase of the project is expected to bring several jobs to Green Countians in various work stages.

Rick Kirkland, a real estate appraiser, spoke of his studies which showed that land values were not affected by a nearby solar farm.

Carson Hardraker, CEO of Carolina Solar Energy, said that her company will probably not be the long term operator of the project, but will, more than likely, transfer to another company who will actually provide the operation of the solar energy farm, once it is up and running.

Hardraker said they have worked with five different companies over the years and are selective in the companies with whom they partner.

More details about Carolina Solar Energy and their various projects, including Horseshoe Bend, are available on the company's website at carolinasolarenergy.com and the video which was shown at Thursday night's meeting is also available on the site.

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Prayer Walk
Community comes together to pray for county

Sports | 8A
Preparation
Youth sports prep for upcoming seasons, remain hopeful

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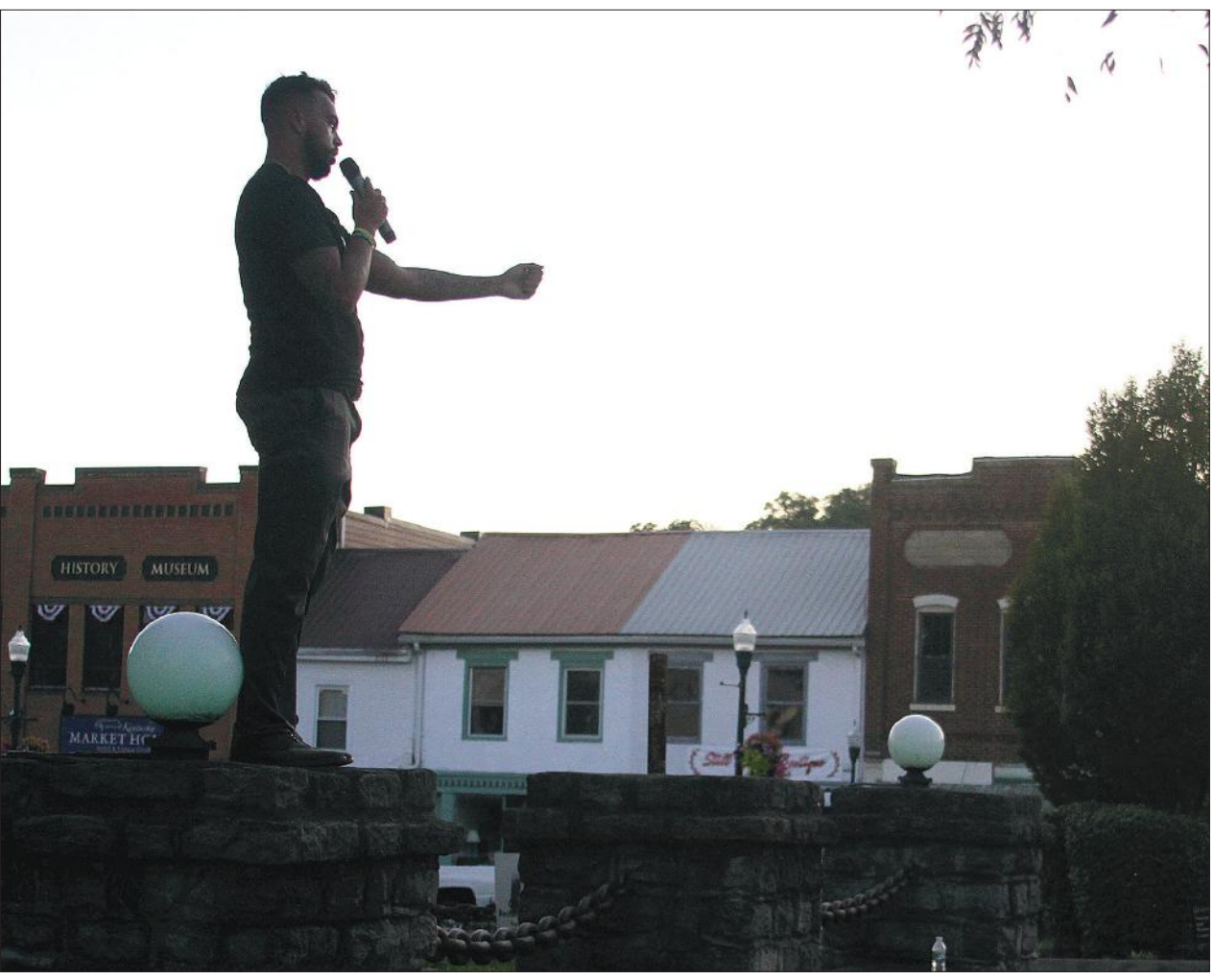

Photo by Angelina Alcott

Justice Bishop, one of the peaceful protest organizers, addresses attendees for the Black Lives Matter Protest held in Greensburg Saturday. This was the third BLM protest held in Greensburg, and the first organized entirely by county natives. Bishop wanted to make sure this event was peaceful and respectful. Bishop said that as a whole community, we should show togetherness and unity to progress forward. His message was delivered and received peacefully.

School reopening plan adopted, GCHS construction approved

The Green County Board of Education met in regular session Thursday, July 9. The meeting was available for viewing by the public through the district's YouTube and Social Media pages.

During the meeting the board took action to formally adopt the district's fall reopening plan.

The district has been developing the plan for the last several months and was recently unveiled by Superintendent Hodges. The district has strived to be transparent throughout the process by frequently releasing surveys and allowing for student, family, and community input. The final plan was announced through a video on the district's social media pages.

The plan features two options for students including an in-class and virtual learning opportunities. The reopening plan has also been released on the district's social media pages, website, and radio announcements and was also featured in an article in the Record-Herald July 1. The district will also be mailing a copy of the reopening plan to the home of every student enrolled in the district. The plan was approved by local and state health and education officials and the board's vote Thursday night was the last step in making it the official guidance document for the school's reopening strategy.

Superintendent Hodges also presented a draft of the district's 2020 Strategic Plan. The document will be utilized by district leaders and staff to set the course of the district and outline the goals it hopes to achieve over the next five years. In developing the strategic plan, the district created eight committees in major areas of emphasis for the district including: Academics, Technology, Student Life, Marketing, Leadership, Finance, Facilities, and School Identity. Each committee was composed of district administration, staff, students, and community members.

"It is vitally important that we, as a district, have sharpness and clarity for the future," Hodges said, on the importance of the strategic plan. "This plan helps us to remain focused on where we want to be as a district and I am fully confident that over the next five years we will continue to see growth and improvement all across our district."

The board also approved of a Buildings and Grounds One Form (BG1) in relation to the construction of a new Green County High School.

The document is the first official step in starting the process of constructing a new school. The form outlines the project scope and budget.

See **BOE**, page 10A

Photo submitted

Surface drilling was underway at Green County High School recently. The geotechnical boring and analysis was conducted by Terracon of Lexington. Surveying was conducted by Pitman Green. Surveying and core drilling are the initial processes of building the new high school.

Tomorrow: Solar energy possibility

By Dale Curry
Staff Writer

A public hearing to discuss a solar energy project possibly coming to Green County is scheduled for tomorrow night at 5:30 p.m.

Horseshoe Bend Solar, LLC, is conducting a meeting about a project they are hoping to build off Kentucky Highway 218 in Green County that will have significant economic impact on Green County. Horseshoe Bend is the name of the Green County project, owned by Carolina Solar Energy.

Carson Harkraker, CEO of Carolina Solar Energy, says that their company has been in business since 2004. The company was started by her father and most of their solar projects have been in North Carolina and Virginia but are now venturing into Kentucky.

Similar projects are under development in Lancaster, Kentucky as well as in neighboring Summer Shade, in Metcalfe County.

Electricity that is produced by these solar energy companies is sold to businesses that have a state mandate to buy renewable energy. Toyota is an example of a company that has signed up to purchase renewable energy. Electricity that is produced by solar panels has no impact on local electrical rates, according to Harkrader.

"A solar company will normally pay about one million dollars in property taxes over the first twenty years of the project," Harkrader said.

That means significant income for Green County.

"There will also be construction jobs," said Harkrader. "We anticipate this project will be built in 2023 and we expect there to be about 300 total jobs during that construction phase. Normally a project will take eight to 12 months to build."

A large printed map showing the site plans is available at the local courthouse through the end of business today.

"The panels will be set back off Highway 218," Harkrader said. "If you are driving on 218, you won't even know that it's there."

Harkrader also explained that the panels are low-impact.

See **Solar**, page 10A

Russell Creek Bridge to open, Happyville Rd. project to start

By Clevis Jeffries
Staff Writer

Green County Fiscal Court, in a special called meeting Thursday via Zoom and Facebook Live, were provided updates by Judge-Executive John Frank concerning the Russell Creek Bridge and Happyville Road projects.

Judge-Executive Frank said Russell Creek Bridge should be open to the public for travel in a week or so and the Happyville Road project, partially funded by a grant of approximately $40,000, is expected to start the second week of August.

"The way things are progressing right now plans are to have the Russell Creek Bridge open in approximately one week. I appreciate everyone's cooperation while construction has been going on at that location," said Judge-Executive John Frank.

"Again, I am thrilled that we have been awarded this grant. This grant will be used to resurface a one-half mile portion of Happyville Road using a rubber-modified asphalt mix. The county will resurface the other half mile with regular asphalt. This is part of a five-year study to try and find a use for shredded recycled tires."

Magistrates unanimously approved:

(1) Third reading of the fiscal year 2020-2021 budget without the July 2, 2020 proposed changes;

(2) Confirmation and readoption of fiscal year 2020-2021 budget without the July 2, 2020 proposed changes.

Judge Frank also informed the Court of upcoming public hearings.

See **Fiscal**, page 10A

Photos submitted

Construction continues on the tennis court renovations. The asphalt has been poured and the fence is currently being erected.

The district recently accepted delivery of two new 72-passenger International buses. The buses will be notable as being the third and fourth buses with air conditioners to be added to the district's fleet. Both buses were purchased with partial funding provided by the Kentucky Clean Diesel Grant.

BOE

From page 1A

Building design and programming planning will occur throughout the fall. Bond sales are expected to occur in the spring of 2021 and construction starting in the summer of 2021. Most school construction projects take between 18-24 months. The new high school was enabled through over $7 million in urgent needs funding provided through the FY21 legislative budget passed in April of this year.

Hodges updated the board on progress related to multiple projects across the district.

- Construction continues as part of the tennis court renovations. The asphalt has been poured and the fence is currently being erected. The tennis project is expected to be completed in the coming weeks.

- The district has purchased close to 400 Chromebooks in an effort to increase student devices for the academic year ahead.

- The district recently accepted delivery of two new 72-passenger International buses. The buses will be notable as being the third and fourth buses with air conditioners to be added to the district's fleet. Both buses were purchased with partial funding provided by the Kentucky Clean Diesel Grant.

- Green River Sealcoating and Striping recently completed resealing and striping multiple parking lots and driveways across the district.

- A new scoreboard, LED videoboard, and delay of game clocks are currently in production and will be installed at the football field this summer. These items were funded through a generous partnership with Limestone Bank.

In other items of normal business, the board approved of the 2020-2021 non-resident contracts, emergency certifications and maternity leave applications, and district assurances.

The board voted to advertise for bids on food service equipment repair services.

The board conducted its annual review of the district's data security and breach notification practice guide and adopted the second reading of the updated policy manual.

The next regular monthly board meeting is set for Aug. 13, 2020 at 5:30 p.m. CT.

Solar

From page 1A

"They can be a maximum of 15 feet high but are usually much lower than that," she said.

Harkrader explained that the posts which hold the panels in place are driven down into the ground about seven feet, ensuring that they are stable but no concrete is used to hold them in place, maintaining the integrity of the farmland.

"We also plan to have about two acres planted with pollinating species," Harkrader said, "which will help support any surrounding farmland."

That means a variety of flowers and grasses will be planted in those two acres to attract bees, butterflies or other animals that would work in the pollination process.

"The life span of a solar farm project is about 30-40 years," Harkrader said. "After that, the landowner can remove the posts and turn the land back into farmland or other uses."

Green County Judge Executive John Frank said, "I've had several contacts with the people from Carolina Solar Energy and we are still working out details but we are doing all we can to work with the company to make it happen."

The meeting tomorrow night can be attended on-line via Zoom or a limited number of people may attend the meeting at the Greensburg Community and Senior Center which is next door to the library.

Harkrader encouraged people to register early to attend the meeting either in person or online.

To register for the Zoom meeting, participants need to go online to http://solar-projects.net/greencountysolar.

People who want to be part of the in-person meeting must reserve a spot by emailing info@carolinasolarenergy.com or by calling the company at 984-260-8038.

Judge Executive John Frank said, "I highly encourage people to be part of the meeting to listen and learn for themselves about the project."

To learn more information about the proposed project, viewers may go online to carolinasolarenergy.com and click on projects. Scroll down the page to Horseshoe Bend. Readers can find an impact study that has been conducted as well as a video about the proposed project.

Fiscal Court

From page 1A

Those include:

(1) Public hearing to be held July 27 at 5 p.m CDT at the Greensburg United Methodist Church pavilion regarding the proposed Green County Food Pantry building;

(2) Public hearings to be held July 27 at 6 p.m. CDT at the Green County Courthouse and via Facebook Live regarding Bill Jones Road and Henneine-Berry Road.

"There will be a public hearing on July 27 at 5 p.m. central time concerning the proposed new food pantry building. I encourage all that can to attend and express their opinion as to the need for this new facility," said Judge Frank.

"There will also be two public hearings regarding partial road closings. These hearings are part of the process required by statute to close or partially close any road."

Attachment G

Horseshoe Bend Feasibility Study Report

Generation Interconnection

Feasibility Study Report

for

Queue Project AF1-050

SUMMER SHADE - GREEN COUNTY 161 KV

36 MW Capacity / 60 MW Energy

January, 2020

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1 Preface

The intent of the feasibility study is to determine a plan, with ballpark cost and construction time estimates, to connect the subject generation to the PJM network at a location specified by the Interconnection Customer. The Interconnection Customer may request the interconnection of generation as a capacity resource or as an energy-only resource. As a requirement for interconnection, the Interconnection Customer may be responsible for the cost of constructing: (1) Direct Connections, which are new facilities and/or facilities upgrades needed to connect the generator to the PJM network, and (2) Network Upgrades, which are facility additions, or upgrades to existing facilities, that are needed to maintain the reliability of the PJM system.

In some instances a generator interconnection may not be responsible for 100% of the identified network upgrade cost because other transmission network uses, e.g. another generation interconnection, may also contribute to the need for the same network reinforcement. Cost allocation rules for network upgrades can be found in PJM Manual 14A, Attachment B. The possibility of sharing the reinforcement costs with other projects may be identified in the feasibility study, but the actual allocation will be deferred until the impact study is performed.

The Interconnection Customer seeking to interconnect a wind or solar generation facility shall maintain meteorological data facilities as well as provide that meteorological data which is required per Schedule H to the Interconnection Service Agreement and Section 8 of Manual 14D.

PJM utilizes manufacturer models to ensure the performance of turbines is properly captured during the simulations performed for stability verification and, where applicable, for compliance with low voltage ride through requirements. Turbine manufacturers provide such models to their customers. The list of manufacturer models PJM has already validated is contained in Attachment B of Manual 14G. Manufacturer models may be updated from time to time, for various reasons such as to reflect changes to the control systems or to more accurately represent the capabilities turbines and controls which are currently available in the field. Additionally, as new turbine models are developed, turbine manufacturers provide such new models which must be used in the conduct of these studies. PJM needs adequate time to evaluate the new models in order to reduce delays to the System Impact Study process timeline for the Interconnection Customer as well as other Interconnection Customers in the study group. Therefore, PJM will require that any Interconnection Customer with a new manufacturer model must supply that model to PJM, along with a $10,000 fully refundable deposit, no later than three (3) months prior to the starting date of the System Impact Study (See Section 4.3 for starting dates) for the Interconnection Request which shall specify the use of the new model. The Interconnection Customer will be required to submit a completed dynamic model study request form (Attachment B-1 of Manual 14G) in order to document the request for the study.

The Feasibility Study estimates do not include the feasibility, cost, or time required to obtain property rights and permits for construction of the required facilities. The project developer is responsible for the right of way, real estate, and construction permit issues. For properties currently owned by Transmission Owners, the costs may be included in the study.

2 General

The Interconnection Customer (IC), has proposed a Solar generating facility located in Green County, KY. The installed facilities will have a total capability of 60 MW with 36 MW of this output being recognized by PJM as Capacity. The proposed in-service date for this project is 12/31/2021. This study does not imply a TO commitment to this in-service date.

Queue Number	**AF1-050**
Project Name	SUMMER SHADE - GREEN COUNTY 161 KV
State	Kentucky
County	Green
Transmission Owner	EKPC
MFO	60
MWE	60
MWC	36
Fuel	Solar
Basecase Study Year	2023

2.1 Point of Interconnection

AF1-050 will interconnect with the EKPC transmission system tapping the Green County to Summer Shade 161 kV line.

2.2 Cost Summary

The AF1-050 project will be responsible for the following costs:

Description	Total Cost
Attachment Facilities	$610,000
Direct Connection Network Upgrade	$5,420,000
Non Direct Connection Network Upgrades	$1,670,000
Total Costs	**$7,700,000**

In addition, the AF1-050 project may be responsible for a contribution to the following costs

Description	Total Cost
System Upgrades	$670,000

Cost allocations for these upgrades will be provided in the System Impact Study Report.

3 Transmission Owner Scope of Work

4 Attachment Facilities

The total preliminary cost estimate for the Attachment work is given in the table below. These costs do not include CIAC Tax Gross-up.

Description	Total Cost
Install necessary equipment (a 161 kV isolation switch structure and associated switch, plus interconnection metering, fiber-optic connection and telecommunications equipment, circuit breaker and associated switches, and relay panel) at the new South Green County switching station, to accept the IC generator lead line/bus (Estimated time to implement is 24 months)	$610,000
Total Attachment Facility Costs	$610,000

5 Direct Connection Cost Estimate

The total preliminary cost estimate for the Direct Connection work is given in the table below. These costs do not include CIAC Tax Gross-up.

Description	Total Cost
Construct a new 161 kV switching station (South Green County Switching) to facilitate connection of the IC solar generation project to the existing Summer Shade-Green County 161 kV line (Estimated time to implement is 24 months)	$5,420,000
Total Direct Connection Facility Costs	$5,420,000

6 Non-Direct Connection Cost Estimate

The total preliminary cost estimate for the Non-Direct Connection work is given in the table below. These costs do not include CIAC Tax Gross-up.

Description	Total Cost
Construct facilities to loop the existing Summer Shade-Green County 161 kV line into the new South Green County switching station (Estimated time to implement is 24 months)	$560,000
Modify relays and/or settings at Summer Shade substation for the existing line to the new South Green County switching station (Estimated time to implement is 9 months)	$70,000
Modify relays and/or settings at Green County substation for the existing line to the new South Green County switching station (Estimated time to implement is 9 months)	$70,000
Install OPGW on the South Green County-Green County 161 kV line (7.9 miles) (Estimated time to implement is 14 months)	$970,000
Total Non-Direct Connection Facility Costs	$1,670,000

7 Incremental Capacity Transfer Rights (ICTRs)

Will be determined at a later study phase

8 Interconnection Customer Requirements

1. An Interconnection Customer entering the New Services Queue on or after October 1, 2012 with a proposed new Customer Facility that has a Maximum Facility Output equal to or greater than 100 MW shall install and maintain, at its expense, phasor measurement units (PMUs). See Section 8.5.3 of Appendix 2 to the Interconnection Service Agreement as well as section 4.3 of PJM Manual 14D for additional information.

2. The Interconnection Customer may be required to install and/or pay for metering as necessary to properly track real time output of the facility as well as installing metering which shall be used for billing purposes. See Section 8 of Appendix 2 to the Interconnection Service Agreement as well as Section 4 of PJM Manual 14D for additional information.

9 Revenue Metering and SCADA Requirements

9.1 PJM Requirements

The Interconnection Customer will be required to install equipment necessary to provide Revenue Metering (KWH, KVARH) and real time data (KW, KVAR) for IC's generating Resource. See PJM Manuals M-01 and M-14D, and PJM Tariff Sections 24.1 and 24.2.

9.2 EKPC Requirements

The Interconnection Customer will be required to comply with all EKPC Revenue Metering Requirements for Generation Interconnection Customers. The Revenue Metering Requirements may be found within the "EKPC Facility Connection Requirements" document located at the following link:

http://www.pjm.com/planning/design-engineering/to-tech-standards/ekpc.aspx

10 Network Impacts

The Queue Project AF1-050 was evaluated as a 60.0 MW (Capacity 36.0 MW) injection tapping the Green County to Summer Shade 161 kV line in the EKPC area. Project AF1-050 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AF1-050 was studied with a commercial probability of 0.53. Potential network impacts were as follows:

Summer Peak Load Flow

11 Generation Deliverability

(Single or N-1 contingencies for the Capacity portion only of the interconnection)

None

12 Multiple Facility Contingency

(Double Circuit Tower Line, Fault with a Stuck Breaker, and Bus Fault contingencies for the full energy output)

None

13 Contribution to Previously Identified Overloads

(This project contributes to the following contingency overloads, i.e. "Network Impacts", identified for earlier generation or transmission interconnection projects in the PJM Queue)

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
40958260	342286	2SOMERSET	69.0	EKPC	342287	2SOMERSET KU	69.0	EKPC	1	EKPC_P7-1_COOP 161 DBL 2	tower	115.0	112.64	114.37	DC	4.4
40958160	342287	2SOMERSET KU	69.0	EKPC	324531	2FERGUSON SO	69.0	LGEE	1	EKPC_P7-1_COOP 161 DBL 2	tower	105.0	124.56	126.74	DC	5.08
40958197	342718	5COOPER2	161.0	EKPC	324141	5ELIHU	161.0	LGEE	1	EKPC_P7-1_LAURL 161 DBL	tower	277.0	115.49	118.22	DC	7.58
41136751	342718	5COOPER2	161.0	EKPC	324141	5ELIHU	161.0	LGEE	1	EKPC_P1-2_LAUR-L DAM161	single	277.0	106.75	108.4	DC	4.56
41480572	342718	5COOPER2	161.0	EKPC	324141	5ELIHU	161.0	LGEE	1	EKPC_P4-5_LAURLS50-1024	breaker	277.0	115.45	118.19	DC	7.58

14 Potential Congestion due to Local Energy Deliverability

PJM also studied the delivery of the energy portion of this interconnection request. Any problems identified below are likely to result in operational restrictions to the project under study. The developer can proceed with network upgrades to eliminate the operational restriction at their discretion by submitting a Merchant Transmission Interconnection request.

Note: Only the most severely overloaded conditions are listed below. There is no guarantee of full delivery of energy for this project by fixing only the conditions listed in this section. With a Transmission Interconnection

Request, a subsequent analysis will be performed which shall study all overload conditions associated with the overloaded element(s) identified.

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
4113674 9	34271 8	5COOPER 2	161. 0	EKPC	32414 1	5ELIH U	161. 0	LGEE	1	EKPC_P1 -2_LAUR- L DAM161	operatio n	277.0	115.27	118.02	DC	7.61
4113675 2	34271 8	5COOPER 2	161. 0	EKPC	32414 1	5ELIH U	161. 0	LGEE	1	Base Case	operatio n	219.0	97.56	100.53	DC	6.49

15 System Reinforcements

ID	Index	Facility	Upgrade Description	Cost
40958260	1	**2SOMERSET 69.0 kV - 2SOMERSET KU 69.0 kV Ckt 1**	**r0080 (82) : Replace the 500 MCM copper jumpers at the Somerset substation using 750 MCM copper or equivalent** **Project Type : FAC** **Cost : $10,000** **Time Estimate : 6.0 Months**	$10,000
40958160	2	**2SOMERSET KU 69.0 kV - 2FERGUSON SO 69.0 kV Ckt 1**	**r0077 (79) : LGE/KU violation. EKPC emergency rating is 152 MVA.** **Project Type : FAC** **Cost : $0** **Time Estimate : 0.0 Months**	$0
41480572,41136751, 40958197	3	**5COOPER2 161.0 kV - 5ELIHU 161.0 kV Ckt 1**	**r0076 (78) : Increase the maximum operating temperature of the 795 MCM ACSR conductor in the Cooper-Elihu 161 kV line section to 275 degrees F (6.7 miles)** **Project Type : FAC** **Cost : $660,000** **Time Estimate : 9.0 Months**	$660,000
			TOTAL COST	**$670,000**

16 Flow Gate Details

The following indices contain additional information about each flowgate presented in the body of the report. For each index, a description of the flowgate and its contingency was included for convenience. However, the intent of the appendix section is to provide more information on which projects/generators have contributions to the flowgate in question. Although this information is not used "as is" for cost allocation purposes, it can be used to gage other generators impact.It should be noted the generator contributions presented in the appendices sections are full contributions, whereas in the body of the report, those contributions take into consideration the commercial probability of each project.

16.1 Index 1

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
40958260	342286	2SOMERSET	EKPC	342287	2SOMERSET KU	EKPC	1	EKPC_P7-1_COOP 161 DBL 2	tower	115.0	112.64	114.37	DC	4.4

Bus #	Bus	MW Impact
342900	1COOPER1 G	4.4802
342903	1COOPER2 G	8.6895
939131	AE1-143 C	5.3375
939132	AE1-143 E	2.6438
940041	AE1-246 C O1	4.2392
940042	AE1-246 E O1	2.0644
940051	AE1-247 C O1	7.2019
940052	AE1-247 E O1	3.5668
940831	AE2-071 C	1.2979
940832	AE2-071 E	0.8652
943701	AF1-038 C	6.1942
943702	AF1-038 E	4.1294
943821	AF1-050 C	1.1896
943822	AF1-050 E	0.7931
944151	AF1-083 C O1	1.2604
944152	AF1-083 E O1	0.8403
944511	AF1-116 C	3.1726
944512	AF1-116 E	2.1150
944981	**AF1-163 C O1 (Withdrawn : 12/11/2019)**	**2.1292**
944982	**AF1-163 E O1 (Withdrawn : 12/11/2019)**	**1.2371**
945381	AF1-203 C	0.3931
945382	AF1-203 E	0.2620
LGEE	LGEE	0.0120
CPLE	CPLE	0.0304
WEC	WEC	0.0479
LGE-0012019	LGE-0012019	5.0391
CBM-W2	CBM-W2	3.5463
NY	NY	0.0431
CBM-W1	CBM-W1	1.6763
TVA	TVA	1.0696
O-066	O-066	0.5242
CBM-S2	CBM-S2	0.5953
CBM-S1	CBM-S1	5.3335
G-007	G-007	0.0811
MADISON	MADISON	0.7540
MEC	MEC	0.4481

16.2 Index 2

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
40958160	342287	2SOMERSET KU	EKPC	324531	2FERGUSON SO	LGEE	1	EKPC_P7-1_COOP 161 DBL 2	tower	105.0	124.56	126.74	DC	5.08

Bus #	Bus	MW Impact
342900	1COOPER1 G	4.3847
342903	1COOPER2 G	8.5042
939131	AE1-143 C	6.4726
939132	AE1-143 E	3.2061
940041	AE1-246 C O1	5.3429
940042	AE1-246 E O1	2.6019
940051	AE1-247 C O1	9.0769
940052	AE1-247 E O1	4.4954
940831	AE2-071 C	1.6418
940832	AE2-071 E	1.0946
943701	AF1-038 C	8.4535
943702	AF1-038 E	5.6357
943821	AF1-050 C	1.3743
943822	AF1-050 E	0.9162
944151	AF1-083 C O1	1.3582
944152	AF1-083 E O1	0.9055
944511	AF1-116 C	7.2590
944512	AF1-116 E	4.8394
944981	**AF1-163 C O1 (Withdrawn : 12/11/2019)**	**2.6865**
944982	**AF1-163 E O1 (Withdrawn : 12/11/2019)**	**1.5610**
945381	AF1-203 C	0.4972
945382	AF1-203 E	0.3315
CPLE	CPLE	0.0642
WEC	WEC	0.0617
LGE-0012019	LGE-0012019	5.1436
CBM-W2	CBM-W2	4.6028
NY	NY	0.0442
CBM-W1	CBM-W1	2.1893
TVA	TVA	1.4140
O-066	O-066	0.5174
CBM-S2	CBM-S2	1.0057
CBM-S1	CBM-S1	6.9779
G-007	G-007	0.0801
MADISON	MADISON	0.9919
MEC	MEC	0.5800

16.3 Index 3

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
41480572	342718	5COOPER2	EKPC	324141	5ELIHU	LGEE	1	EKPC_P4-5_LAURLS50-1024	breaker	277.0	115.45	118.19	DC	7.58

Bus #	Bus	MW Impact
342900	1COOPER1 G	8.9959
342903	1COOPER2 G	17.5008
342945	1LAUREL 1G	5.4447
939131	AE1-143 C	10.0845
939132	AE1-143 E	4.9951
940041	AE1-246 C O1	9.0965
940042	AE1-246 E O1	4.4299
940051	AE1-247 C O1	15.4539
940052	AE1-247 E O1	7.6537
940831	AE2-071 C	2.5752
940832	AE2-071 E	1.7168
943701	AF1-038 C	6.6859
943702	AF1-038 E	4.4573
943821	AF1-050 C	4.5500
943822	AF1-050 E	3.0334
944151	AF1-083 C O1	4.6078
944152	AF1-083 E O1	3.0719
944511	AF1-116 C	11.3098
944512	AF1-116 E	7.5398
944981	**AF1-163 C O1 (Withdrawn : 12/11/2019)**	**8.6420**
944982	**AF1-163 E O1 (Withdrawn : 12/11/2019)**	**5.0212**
945381	AF1-203 C	1.4716
945382	AF1-203 E	0.9810
CPLE	CPLE	0.0886
WEC	WEC	0.0728
LGE-0012019	LGE-0012019	7.9453
CBM-W2	CBM-W2	6.5438
NY	NY	0.0912
CBM-W1	CBM-W1	2.5020
TVA	TVA	2.1098
O-066	O-066	1.0685
CBM-S2	CBM-S2	1.4912
CBM-S1	CBM-S1	10.2410
G-007	G-007	0.1654
MADISON	MADISON	1.5745
MEC	MEC	0.7802

Affected Systems

17 Affected Systems

17.1 LG&E

LG&E Impacts to be determined during later study phases (as applicable).

17.2 MISO

MISO Impacts to be determined during later study phases (as applicable).

17.3 TVA

TVA Impacts to be determined during later study phases (as applicable).

17.4 Duke Energy Progress

Duke Energy Progress Impacts to be determined during later study phases (as applicable).

17.5 NYISO

NYISO Impacts to be determined during later study phases (as applicable).

18 Contingency Descriptions

Contingency Name	Contingency Definition
EKPC_P1-2_LAUR-L DAM161	CONTINGENCY 'EKPC_P1-2_LAUR-L DAM161' /* LAUREL CO - LAUREL DAM OPEN BRANCH FROM BUS 342754 TO BUS 342757 CKT 1 /* 342754 5LAUREL CO 161.00 342757 5LAUREL DAM 161.00 END
Base Case	
EKPC_P4-5_LAURL S50-1024	CONTINGENCY 'EKPC_P4-5_LAURL S50-1024' /* LAUREL CO OPEN BUS 342754 /* 5LAUREL CO DROPS BUS OPEN BRANCH FROM BUS 324688 TO BUS 342781 CKT 1 /* 324688 2PITTSKU 69.000 342781 5PITTSBURG 161.00 OPEN BRANCH FROM BUS 342781 TO BUS 342820 CKT 1 /* 342781 5PITTSBURG 161.00 342820 5TYNER 161.00 END
EKPC_P7-1_LAURL 161 DBL	CONTINGENCY 'EKPC_P7-1_LAURL 161 DBL' /* LAUREL CO - LAUREL DAM 161 & LAUREL CO - TYNER 161 OPEN BRANCH FROM BUS 342754 TO BUS 342757 CKT 1 /* 342754 5LAUREL CO 161.00 342757 5LAUREL DAM 161.00 OPEN BRANCH FROM BUS 342754 TO BUS 342781 CKT 1 /* 342754 5LAUREL CO 161.00 342781 5PITTSBURG 161.00 OPEN BRANCH FROM BUS 342781 TO BUS 342820 CKT 1 /* 342781 5PITTSBURG 161.00 342820 5TYNER 161.00 END
EKPC_P7-1_COOP 161 DBL 2	CONTINGENCY 'EKPC_P7-1_COOP 161 DBL 2' /* COOPER - ELIHU 161 & COOPER - LAUREL DAM 161 OPEN BRANCH FROM BUS 324141 TO BUS 342718 CKT 1 /* 324141 5ELIHU 161.00 342718 5COOPER2 161.00 OPEN BRANCH FROM BUS 342718 TO BUS 342757 CKT 1 /* 342718 5COOPER2 161.00 342757 5LAUREL DAM 161.00 END

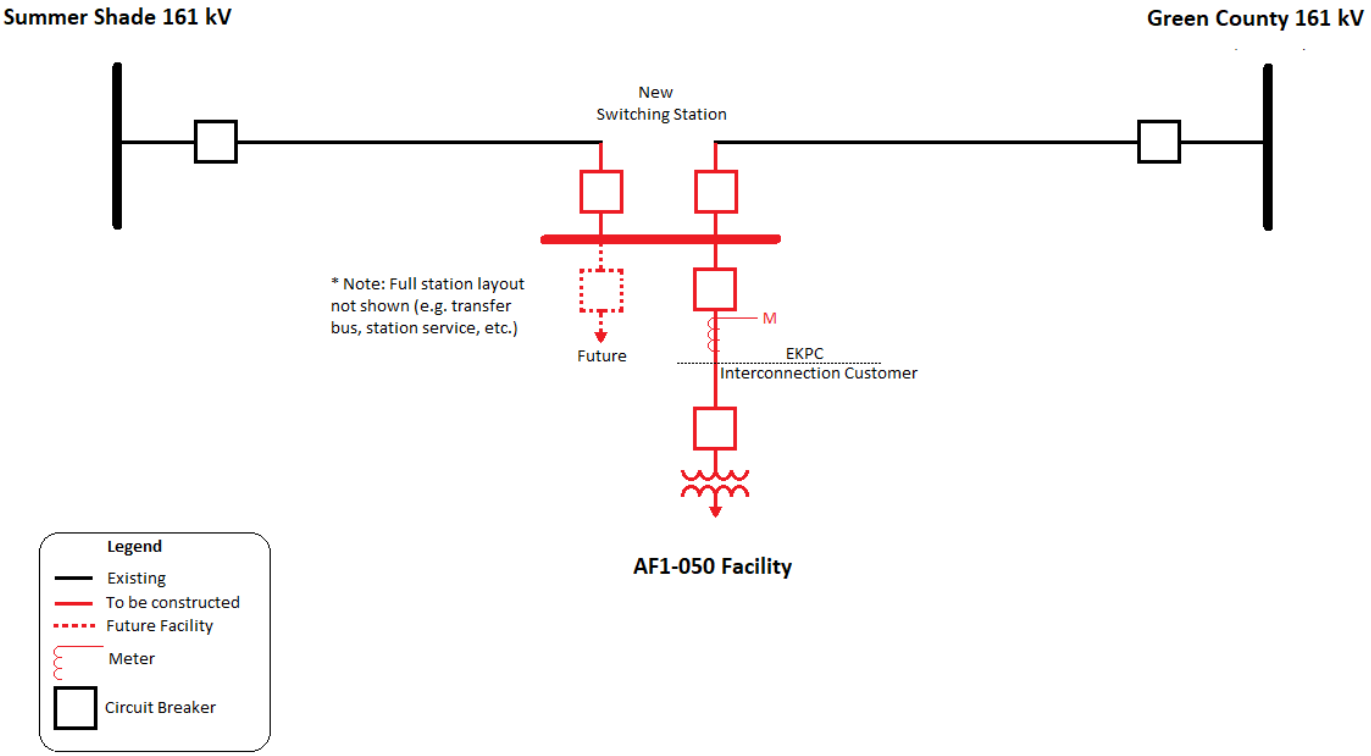
Short Circuit

19 Short Circuit

The following Breakers are overduty

Bus Number	Bus Name	BREAKER	Type	Capacity (Amps)	Duty Percentage Post Queue	Duty Percentage Pre Queue

20 Single Line Diagram



Attachment H

Horseshoe Bend System Impact Study Report

Generation Interconnection

System Impact Study Report

for

Queue Project AF1-050

SUMMER SHADE - GREEN COUNTY 161 KV

36 MW Capacity / 60 MW Energy

August, 2020

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1 Introduction

This System Impact Study has been prepared in accordance with the PJM Open Access Transmission Tariff, 205, as well as the System Impact Study Agreement between the Interconnection Customer (IC), and PJM Interconnection, LLC (PJM), Transmission Provider (TP). The Interconnected Transmission Owner (ITO) is EKPC.

2 Preface

The intent of the System Impact Study is to determine a plan, with approximate cost and construction time estimates, to connect the subject generation interconnection project to the PJM network at a location specified by the Interconnection Customer. As a requirement for interconnection, the Interconnection Customer may be responsible for the cost of constructing: Network Upgrades, which are facility additions, or upgrades to existing facilities, that are needed to maintain the reliability of the PJM system. All facilities required for interconnection of a generation interconnection project must be designed to meet the technical specifications (on PJM web site) for the appropriate transmission owner.

In some instances an Interconnection Customer may not be responsible for 100% of the identified network upgrade cost because other transmission network uses, e.g. another generation interconnection or merchant transmission upgrade, may also contribute to the need for the same network reinforcement. The possibility of sharing the reinforcement costs with other projects may be identified in the Feasibility Study, but the actual allocation will be deferred until the System Impact Study is performed.

The System Impact Study estimates do not include the feasibility, cost, or time required to obtain property rights and permits for construction of the required facilities. The project developer is responsible for the right of way, real estate, and construction permit issues. For properties currently owned by Transmission Owners, the costs may be included in the study.

The Interconnection Customer seeking to interconnect a wind or solar generation facility shall maintain meteorological data facilities as well as provide that meteorological data which is required per Schedule H to the Interconnection Service Agreement and Section 8 of Manual 14D.

3 General

The Interconnection Customer (IC), has proposed a Solar; Storage generating facility located in Green County, Kentucky. The installed facilities will have a total capability of 60 MW with 36 MW of this output being recognized by PJM as Capacity.

The proposed in-service date for this project is December 31, 2022. This study does not imply a TO commitment to this in-service date.

The objective of this System Impact Study is to determine budgetary cost estimates and approximate construction timelines for identified transmission facilities required to connect the proposed generating facilities to the ITO transmission system. These reinforcements include the Attachment Facilities, Local Upgrades, and Network Upgrades required for maintaining the reliability of the ITO transmission system.

Queue Number	**AF1-050**
Project Name	SUMMER SHADE - GREEN COUNTY 161 KV
State	Kentucky
County	Green
Transmission Owner	EKPC
MFO	60
MWE	60
MWC	36
Fuel	Solar; Storage
Basecase Study Year	2023

Any new service customers who can feasibly be commercially operable prior to June 1st of the basecase study year are required to request interim deliverability analysis.

4 Point of Interconnection

AF1-050 will interconnect with the EKPC transmission system tapping the Green County to Summer Shade 161 kV line.

5 Cost Summary

The AF1-050 project will be responsible for the following costs:

Description	Total Cost
Attachment Facilities	$610,000
Direct Connection Network Upgrade	$5,420,000
Non Direct Connection Network Upgrades	$1,670,000
Allocation for New System Upgrades*	$0
Contribution to Previously Identified Upgrades*	$0
Total Costs	**$7,700,000**

*As your project progresses through the study process and other projects modify their request or withdraw, then your cost allocation could change.

This cost excludes a Federal Income Tax Gross Up charges. This tax may or may not be charged based on whether this project meets the eligibility requirements of IRS Notice 88-129. If at a future date it is determined that the Federal Income Tax Gross charge is required, the Transmission Owner shall be reimbursed by the Interconnection Customer for such taxes.

Note 1: PJM Open Access Transmission Tariff (OATT) section 217.3A outline cost allocation rules. The rules are further clarified in PJM Manual 14A Attachment B. The allocation of costs for a network upgrade will start with the first Queue project to cause the need for the upgrade. Later queue projects will receive cost allocation contingent on their contribution to the violation and are allocated to the queues that have not closed less than 5 years following the execution of the first Interconnection Service Agreement which identifies the need for this upgrade.

Note 2: For customers with System Reinforcements listed: If your present cost allocation to a System Reinforcement indicates $0, then please be aware that as changes to the interconnection process occur, such as prior queued projects withdrawing from the queue, reducing in size, etc, the cost responsibilities can change and a cost allocation may be assigned to your project. In addition, although your present cost allocation to a System Reinforcement is presently $0, your project may need this system reinforcement completed to be deliverable to the PJM system. If your project comes into service prior to completion of the system reinforcement, an interim deliverability study for your project will be required.

6 Transmission Owner Scope of Work

6.1 Attachment Facilities

The total preliminary cost estimate for the Attachment work is given in the table below. These costs do not include CIAC Tax Gross-up.

Description	Total Cost
Install necessary equipment (a 161 kV isolation switch structure and associated switch, plus interconnection metering, fiber-optic connection and telecommunications equipment, circuit breaker and associated switches, and relay panel) at the new South Green County switching station, to accept the IC generator lead line/bus (Estimated time to implement is 24 months)	$610,000
Total Attachment Facility Costs	**$610,000**

6.2 Direct Connection Cost Estimate

The total preliminary cost estimate for the Direct Connection work is given in the table below. These costs do not include CIAC Tax Gross-up.

Description	Total Cost
Construct a new 161 kV switching station (South Green County Switching) to facilitate connection of the IC solar generation project to the existing Summer Shade-Green County 161 kV line (Estimated time to implement is 24 months)	$5,420,000
Total Direct Connection Facility Costs	**$5,420,000**

6.3 Non-Direct Connection Cost Estimate

The total preliminary cost estimate for the Non-Direct Connection work is given in the table below. These costs do not include CIAC Tax Gross-up.

Description	Total Cost
Construct facilities to loop the existing Summer Shade-Green County 161 kV line into the new South Green County switching station (Estimated time to implement is 24 months)	$560,000

Description	Total Cost
Modify relays and/or settings at Summer Shade substation for the existing line to the new South Green County switching station (Estimated time to implement is 9 months)	$70,000
Modify relays and/or settings at Green County substation for the existing line to the new South Green County switching station (Estimated time to implement is 9 months)	$70,000
Install OPGW on the South Green County-Green County 161 kV line (7.9 miles) (Estimated time to implement is 14 months)	$970,000
Total Non-Direct Connection Facility Costs	**$1,670,000**

7 Incremental Capacity Transfer Rights (ICTRs)

None

8 Interconnection Customer Requirements

It is understood that the Interconnection Customer (IC) is responsible for all costs associated with this interconnection. The costs above are reimbursable to the Transmission Owner. The cost of the IC's generating plant and the costs for the line connecting the generating plant to the Point of Interconnection are not included in this report; these are assumed to be the IC's responsibility.

The Generation Interconnection Agreement does not in or by itself establish a requirement for the Transmission Owner to provide power for consumption at the developer's facilities. A separate agreement may be reached with the local utility that provides service in the area to ensure that infrastructure is in place to meet this demand and proper metering equipment is installed. It is the responsibility of the developer to contact the local service provider to determine if a local service agreement is required.

1. An Interconnection Customer entering the New Services Queue on or after October 1, 2012 with a proposed new Customer Facility that has a Maximum Facility Output equal to or greater than 100 MW shall install and maintain, at its expense, phasor measurement units (PMUs). See Section 8.5.3 of Appendix 2 to the Interconnection Service Agreement as well as section 4.3 of PJM Manual 14D for additional information.

2. The Interconnection Customer may be required to install and/or pay for metering as necessary to properly track real time output of the facility as well as installing metering which shall be used for billing purposes. See Section 8 of Appendix 2 to the Interconnection Service Agreement as well as Section 4 of PJM Manual 14D for additional information.

9 Revenue Metering and SCADA Requirements

9.1 PJM Requirements

The Interconnection Customer will be required to install equipment necessary to provide Revenue Metering (KWH, KVARH) and real time data (KW, KVAR) for IC's generating Resource. See PJM Manuals M-01 and M-14D, and PJM Tariff Section 8 of Attachment O.

9.2 Meteorological Data Reporting Requirements

Solar generation facilities shall provide the Transmission Provider with site-specific meteorological data including:

- Back Panel temperature (Fahrenheit)
- Irradiance (Watts/meter^2)
- Ambient air temperature (Fahrenheit) – (Accepted, not required)
- Wind speed (meters/second) – (Accepted, not required)

- Wind direction (decimal degrees from true north) – (Accepted, not required)

9.3 Interconnected Transmission Owner Requirements

The IC will be required to comply with all Interconnected Transmission Owner's revenue metering requirements for generation interconnection customers located at the following link:

http://www.pjm.com/planning/design-engineering/to-tech-standards/

10 Summer Peak Analysis

The Queue Project AF1-050 was evaluated as a 60.0 MW (Capacity 36.0 MW) injection tapping the Green County to Summer Shade 161 kV line in the EKPC area. Project AF1-050 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AF1-050 was studied with a commercial probability of 100.0 %. Potential network impacts were as follows:

10.1 Generation Deliverability

(Single or N-1 contingencies for the Capacity portion only of the interconnection)

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
4113675 1	34271 8	5COOPER 2	161. 0	EKPC	32414 1	5ELIH U	161. 0	LGEE	1	EKPC_P1 -2_LAUR- L DAM161	singl e	277.0	99.71	101.41	AC	4.56

10.2 Multiple Facility Contingency

(Double Circuit Tower Line, Fault with a Stuck Breaker, and Bus Fault contingencies for the full energy output)

None

10.3 Contribution to Previously Identified Overloads

(This project contributes to the following contingency overloads, i.e. "Network Impacts", identified for earlier generation or transmission interconnection projects in the PJM Queue)

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
4095826 0	34228 6	2SOMERSE T	69.0	EKPC	34228 7	2SOMERSE T KU	69.0	EKPC	1	EKPC_P7 -1_COOP 161 DBL 2	tower	115.0	103.25	106.59	AC	4.4
4095816 0	34228 7	2SOMERSE T KU	69.0	EKPC	32453 1	2FERGUSO N SO	69.0	LGEE	1	EKPC_P7 -1_COOP 161 DBL 2	tower	105.0	113.39	117.59	AC	5.09
4095819 7	34271 8	5COOPER2	161. 0	EKPC	32414 1	5ELIHU	161. 0	LGEE	1	EKPC_P7 - 1_LAURL 161 DBL	tower	277.0	105.95	108.76	AC	7.59
4148057 2	34271 8	5COOPER2	161. 0	EKPC	32414 1	5ELIHU	161. 0	LGEE	1	EKPC_P4 - 5_LAURL S50- 1024	breake r	277.0	105.96	108.76	AC	7.59
4148057 3	34271 8	5COOPER2	161. 0	EKPC	32414 1	5ELIHU	161. 0	LGEE	1	EKPC_P4 - 5_LAURL S50- 1014	breake r	277.0	105.63	108.45	AC	7.6

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
41764856	342718	5COOPER2	161.0	EKPC	324141	5ELIHU	161.0	LGEE	1	EKPC_P2-2_LAUREL CO 161	bus	277.0	105.63	108.45	AC	7.6

10.4 Steady-State Voltage Requirements

None

10.5 Potential Congestion due to Local Energy Deliverability

PJM also studied the delivery of the energy portion of this interconnection request. Any problems identified below are likely to result in operational restrictions to the project under study. The developer can proceed with network upgrades to eliminate the operational restriction at their discretion by submitting a Merchant Transmission Interconnection request.

Note: Only the most severely overloaded conditions are listed below. There is no guarantee of full delivery of energy for this project by fixing only the conditions listed in this section. With a Transmission Interconnection Request, a subsequent analysis will be performed which shall study all overload conditions associated with the overloaded element(s) identified.

ID	FROM BUS#	FROM BUS	kV	FROM BUS AREA	TO BUS#	TO BUS	kV	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
41136749	342718	5COOPER2	161.0	EKPC	324141	5ELIHU	161.0	LGEE	1	EKPC_P1-2_LAUR-LDAM161	operation	277.0	105.63	108.44	AC	7.61

10.6 System Reinforcements

ID	Idx	Facility	Upgrade Description	Cost	Cost Allocated to AF1-050	Upgrade Number
40958260	2	**2SOMERSET 69.0 kV - 2SOMERSET KU 69.0 kV Ckt 1**	Upgrade the existing 500 MCM CU bus jumpers to 750 MCM CU. 6 month time estimate. New expected SE rating after the upgrade will be 152 MVA. This line overload is presently driven by a prior queue cycle.	$250 K	$0	N6232
40958160	3	**2SOMERSET KU 69.0 kV - 2FERGUSON SO 69.0 kV Ckt 1**	EKPC: SE rating is 152 MVA. No EKPC upgrade required. LG&E: SE rating is 83 MVA. A LG&E affected system study will be required to determine if LG&E upgrades are required on this line. Preliminary upgrade, if determined to be required, is to replace terminal equipment at a cost estimate of $897.613 K.	$0	$0	N/A
41764856,41480573,41480572,41136751,40958197	1	**5COOPER2 161.0 kV - 5ELIHU 161.0 kV Ckt 1**	EKPC: EKPC SE rating is 298 MVA. Increase the operating temperature of the 795 MCM ACSR conductor from 212F to 275F (6.7 miles). EKPC's new SE rating would be 371 MVA. Cost estimate $660K. PJM Network Upgrade N6238. Note: this EKPC upgrade may be dependent upon whether LG&E determines if an LG&E end upgrade is required on this line since the equipment which limits the overall line rating is LG&E equipment. This will be determined with a LG&E affected system study. LG&E: LG&E SE rating is 277 MVA. A LG&E affected system study will be required to determine if LG&E upgrades are required on this line. Preliminary upgrade, if determined to be required, is to upgrade the line conductor at a cost estimate of $28.083 K. New LG&E expected SE rating to be 335 MVA.	$660 K	$0	N6238
			Total Cost	**$910,000**	**$0**	

Note : For customers with System Reinforcements listed: If your present cost allocation to a System Reinforcement indicates $0, then please be aware that as changes to the interconnection process occur, such as prior queued projects withdrawing from the queue, reducing in size, etc, the cost responsibilities can change and a cost allocation may be assigned to your project. In addition, although your present cost allocation to a System Reinforcement is presently $0, your project may need this system reinforcement

completed to be deliverable to the PJM system. If your project comes into service prior to completion of the system reinforcement, an interim deliverability study for your project will be required.

10.7 Flow Gate Details

The following indices contain additional information about each facility presented in the body of the report. For each index, a description of the flowgate and its contingency was included for convenience. The intent of the indices is to provide more details on which projects/generators have contributions to the flowgate in question. All New Service Queue Requests, through the end of the Queue under study, that are contributors to a flowgate will be listed in the indices. Please note that there may be contributors that are subsequently queued after the queue under study that are not listed in the indices. Although this information is not used "as is" for cost allocation purposes, it can be used to gage the impact of other projects/generators. It should be noted the project/generator MW contributions presented in the body of the report are Full MW Impact contributions which are also noted in the indices column named "Full MW Impact", whereas the loading percentages reported in the body of the report, take into consideration the PJM Generator Deliverability Test rules such as commercial probability of each project as well as the ramping impact of "Adder" contributions. The MW Impact found and used in the analysis is shown in the indices column named "Gendeliv MW Impact".

10.7.1 Index 1

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
41764856	342718	5COOPER2	EKPC	324141	5ELIHU	LGEE	1	EKPC_P2-2_LAUREL CO 161	bus	277.0	105.63	108.45	AC	7.6

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
342900	1COOPER1 G	11.4249	50/50	11.4249
342903	1COOPER2 G	22.2261	50/50	22.2261
342945	1LAUREL 1G	6.9148	50/50	6.9148
939131	AE1-143 C	10.1012	50/50	10.1012
939132	AE1-143 E	5.0034	50/50	5.0034
940041	AE1-246 C O1	9.1151	50/50	9.1151
940042	AE1-246 E O1	4.4389	50/50	4.4389
940831	AE2-071 C	2.5805	50/50	2.5805
940832	AE2-071 E	1.7203	50/50	1.7203
943701	AF1-038 C	6.7007	50/50	6.7007
943702	AF1-038 E	4.4671	50/50	4.4671
943821	AF1-050 C	4.5587	50/50	4.5587
943822	AF1-050 E	3.0391	50/50	3.0391
944151	AF1-083 C O1	4.6160	50/50	4.6160
944152	AF1-083 E O1	3.0774	50/50	3.0774
944511	AF1-116 C	11.3285	50/50	11.3285
944512	AF1-116 E	7.5523	50/50	7.5523
945381	AF1-203 C	1.4746	50/50	1.4746
945382	AF1-203 E	0.9830	50/50	0.9830
WEC	WEC	0.0740	Confirmed LTF	0.0740
CPLE	CPLE	0.0939	Confirmed LTF	0.0939
LGE-0012019	LGE-0012019	7.9596	LTF	7.9596
CBM-W2	CBM-W2	6.6667	Confirmed LTF	6.6667
NY	NY	0.0874	Confirmed LTF	0.0874
TVA	TVA	2.1266	Confirmed LTF	2.1266
O-066	O-066	1.0282	Confirmed LTF	1.0282
CBM-S2	CBM-S2	1.5375	Confirmed LTF	1.5375
CBM-S1	CBM-S1	10.3348	Confirmed LTF	10.3348
G-007	G-007	0.1591	Confirmed LTF	0.1591
MADISON	MADISON	1.5886	Confirmed LTF	1.5886
MEC	MEC	0.7913	Confirmed LTF	0.7913
CBM-W1	CBM-W1	2.5771	Confirmed LTF	2.5771

10.7.2 Index 2

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
40958260	342286	2SOMERSET	EKPC	342287	2SOMERSET KU	EKPC	1	EKPC_P7-1_COOP 161 DBL 2	tower	115.0	103.25	106.59	AC	4.4

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
342900	1COOPER1 G	5.6852	50/50	5.6852
342903	1COOPER2 G	11.0266	50/50	11.0266
939131	AE1-143 C	5.3386	Adder	6.28
939132	AE1-143 E	2.6443	Adder	3.11
940041	AE1-246 C O1	4.2405	Adder	4.99
940042	AE1-246 E O1	2.0651	Adder	2.43
940831	AE2-071 C	1.2982	Adder	1.53
940832	AE2-071 E	0.8655	Adder	1.02
943701	AF1-038 C	6.1949	50/50	6.1949
943702	AF1-038 E	4.1299	50/50	4.1299
943821	AF1-050 C	2.2451	Adder	2.64
943822	AF1-050 E	1.4967	Adder	1.76
944151	AF1-083 C O1	2.3786	Adder	2.8
944152	AF1-083 E O1	1.5858	Adder	1.87
944511	AF1-116 C	5.9872	Adder	7.04
944512	AF1-116 E	3.9915	Adder	4.7
945381	AF1-203 C	0.7418	Adder	0.87
945382	AF1-203 E	0.4946	Adder	0.58
WEC	WEC	0.0482	Confirmed LTF	0.0482
LGEE	LGEE	0.0131	Confirmed LTF	0.0131
CPLE	CPLE	0.0318	Confirmed LTF	0.0318
LGE-0012019	LGE-0012019	5.0391	LTF	5.0391
CBM-W2	CBM-W2	3.5872	Confirmed LTF	3.5872
NY	NY	0.0426	Confirmed LTF	0.0426
TVA	TVA	1.0724	Confirmed LTF	1.0724
O-066	O-066	0.5040	Confirmed LTF	0.5040
CBM-S2	CBM-S2	0.6069	Confirmed LTF	0.6069
CBM-S1	CBM-S1	5.3506	Confirmed LTF	5.3506
G-007	G-007	0.0780	Confirmed LTF	0.0780
MADISON	MADISON	0.7560	Confirmed LTF	0.7560
MEC	MEC	0.4513	Confirmed LTF	0.4513
CBM-W1	CBM-W1	1.7014	Confirmed LTF	1.7014

10.7.3 Index 3

ID	FROM BUS#	FROM BUS	FROM BUS AREA	TO BUS#	TO BUS	TO BUS AREA	CKT ID	CONT NAME	Type	Rating MVA	PRE PROJECT LOADING %	POST PROJECT LOADING %	AC|DC	MW IMPACT
40958160	342287	2SOMERSET KU	EKPC	324531	2FERGUSON SO	LGEE	1	EKPC_P7-1_COOP 161 DBL 2	tower	105.0	113.39	117.59	AC	5.09

Bus #	Bus	Gendeliv MW Impact	Type	Full MW Impact
342900	1COOPER1 G	5.5640	50/50	5.5640
342903	1COOPER2 G	10.7915	50/50	10.7915
939131	AE1-143 C	6.4733	50/50	6.4733
939132	AE1-143 E	3.2064	50/50	3.2064
940041	AE1-246 C O1	5.3436	Adder	6.29
940042	AE1-246 E O1	2.6022	Adder	3.06
940831	AE2-071 C	1.6422	Adder	1.93
940832	AE2-071 E	1.0948	Adder	1.29
943701	AF1-038 C	8.4539	50/50	8.4539
943702	AF1-038 E	5.6359	50/50	5.6359
943821	AF1-050 C	2.5937	Adder	3.05
943822	AF1-050 E	1.7291	Adder	2.03
944151	AF1-083 C O1	2.5632	Adder	3.02
944152	AF1-083 E O1	1.7088	Adder	2.01
944511	AF1-116 C	7.2598	50/50	7.2598
944512	AF1-116 E	4.8398	50/50	4.8398
945381	AF1-203 C	0.9384	Adder	1.1
945382	AF1-203 E	0.6256	Adder	0.74
WEC	WEC	0.0621	Confirmed LTF	0.0621
CPLE	CPLE	0.0648	Confirmed LTF	0.0648
LGE-0012019	LGE-0012019	5.1436	LTF	5.1436
CBM-W2	CBM-W2	4.6437	Confirmed LTF	4.6437
NY	NY	0.0431	Confirmed LTF	0.0431
TVA	TVA	1.4154	Confirmed LTF	1.4154
O-066	O-066	0.5107	Confirmed LTF	0.5107
CBM-S2	CBM-S2	1.0115	Confirmed LTF	1.0115
CBM-S1	CBM-S1	6.9864	Confirmed LTF	6.9864
G-007	G-007	0.0790	Confirmed LTF	0.0790
MADISON	MADISON	0.9959	Confirmed LTF	0.9959
MEC	MEC	0.5816	Confirmed LTF	0.5816
CBM-W1	CBM-W1	2.2143	Confirmed LTF	2.2143

10.8 Queue Dependencies

The Queue Projects below are listed in one or more indices for the overloads identified in your report. These projects contribute to the loading of the overloaded facilities identified in your report. The percent overload of a facility and cost allocation you may have towards a particular reinforcement could vary depending on the action of these earlier projects. The status of each project at the time of the analysis is presented in the table. This list may change as earlier projects withdraw or modify their requests.

Queue Number	Project Name	Status
AE1-143	Marion County 161 kV	Active
AE1-246	Barren County-Summer Shade 161 kV	Active
AE2-071	Patton Rd-Summer Shade 69 kV	Active
AF1-038	Sewellton Jct-Webbs Crossroads 69 kV	Active
AF1-050	Summer Shade - Green County 161 kV	Active
AF1-083	Green County-Saloma 161 kV	Active
AF1-116	Marion County 161 kV	Active
AF1-203	Patton Rd-Summer Shade 69 kV	Active

10.9 Contingency Descriptions

Contingency Name	Contingency Definition
EKPC_P2-3_MAR W38-1014	CONTINGENCY 'EKPC_P2-3_MAR W38-1014' /* MARION CO OPEN BRANCH FROM BUS 324280 TO BUS 342769 CKT 1 /* 324280 4MARIONL 138.00 342769 5MARION CO 161.00 OPEN BRANCH FROM BUS 342703 TO BUS 342769 CKT 1 /* 342703 5CASEY CO 161.00 342769 5MARION CO 161.00 OPEN BRANCH FROM BUS 341269 TO BUS 342703 CKT 1 /* 341269 2CASEY CO 69.000 342703 5CASEY CO 161.00 OPEN BRANCH FROM BUS 342703 TO BUS 342760 CKT 1 /* 342703 5CASEY CO 161.00 342760 5LIBERTY J 161.00 END
EKPC_P4-2_MAR W38-1014	CONTINGENCY 'EKPC_P4-2_MAR W38-1014' /* MARION CO OPEN BRANCH FROM BUS 324280 TO BUS 342769 CKT 1 /* 324280 4MARIONL 138.00 342769 5MARION CO 161.00 OPEN BRANCH FROM BUS 342703 TO BUS 342769 CKT 1 /* 342703 5CASEY CO 161.00 342769 5MARION CO 161.00 OPEN BRANCH FROM BUS 341269 TO BUS 342703 CKT 1 /* 341269 2CASEY CO 69.000 342703 5CASEY CO 161.00 OPEN BRANCH FROM BUS 342703 TO BUS 342760 CKT 1 /* 342703 5CASEY CO 161.00 342760 5LIBERTY J 161.00 END
EKPC_P1-2_LAUR-L DAM161	CONTINGENCY 'EKPC_P1-2_LAUR-L DAM161' /* LAUREL CO - LAUREL DAM OPEN BRANCH FROM BUS 342754 TO BUS 342757 CKT 1 /* 342754 5LAUREL CO 161.00 342757 5LAUREL DAM 161.00 END
EKPC_P2-2_LAUREL CO 161	CONTINGENCY 'EKPC_P2-2_LAUREL CO 161' /* LAUREL 161 BUS OPEN BUS 342754 /* 5LAUREL CO END
EKPC_P1-2_COOP-ELIHU161	CONTINGENCY 'EKPC_P1-2_COOP-ELIHU161' /* COOPER - KU ELIHU OPEN BRANCH FROM BUS 324141 TO BUS 342718 CKT 1 /* 324141 5ELIHU 161.00 342718 5COOPER2 161.00 END
EKPC_P7-1_COOP 161 DBL 2	CONTINGENCY 'EKPC_P7-1_COOP 161 DBL 2' /* COOPER - ELIHU 161 & COOPER - LAUREL DAM 161 OPEN BRANCH FROM BUS 324141 TO BUS 342718 CKT 1 /* 324141 5ELIHU 161.00 342718 5COOPER2 161.00 OPEN BRANCH FROM BUS 342718 TO BUS 342757 CKT 1 /* 342718 5COOPER2 161.00 342757 5LAUREL DAM 161.00 END

Contingency Name	Contingency Definition
EKPC_P7-1_LAURL 161 DBL	CONTINGENCY 'EKPC_P7-1_LAURL 161 DBL' /* LAUREL CO - LAUREL DAM 161 & LAUREL CO - TYNER 161 OPEN BRANCH FROM BUS 342754 TO BUS 342757 CKT 1 /* 342754 5LAUREL CO 161.00 342757 5LAUREL DAM 161.00 OPEN BRANCH FROM BUS 342754 TO BUS 342781 CKT 1 /* 342754 5LAUREL CO 161.00 342781 5PITTSBURG 161.00 OPEN BRANCH FROM BUS 342781 TO BUS 342820 CKT 1 /* 342781 5PITTSBURG 161.00 342820 5TYNER 161.00 END
EKPC_P4-5_LAURL S50-1014	CONTINGENCY 'EKPC_P4-5_LAURL S50-1014' /* LAUREL CO OPEN BUS 342754 /* 5LAUREL CO DROPS BUS END
Base Case	
EKPC_P4-5_LAURL S50-1024	CONTINGENCY 'EKPC_P4-5_LAURL S50-1024' /* LAUREL CO OPEN BUS 342754 /* 5LAUREL CO DROPS BUS OPEN BRANCH FROM BUS 324688 TO BUS 342781 CKT 1 /* 324688 2PITTSKU 69.000 342781 5PITTSBURG 161.00 OPEN BRANCH FROM BUS 342781 TO BUS 342820 CKT 1 /* 342781 5PITTSBURG 161.00 342820 5TYNER 161.00 END

11 Light Load Analysis

The Queue Project AF1-050 was evaluated as a 30.0 MW injection/withdrawal (battery) tapping the Green County to Summer Shade 161 kV line in the EKPC area. Project AF1-050 was evaluated for compliance with applicable reliability planning criteria (PJM, NERC, NERC Regional Reliability Councils, and Transmission Owners). Project AF1-050 was studied with a commercial probability of 100.0 %. Potential network impacts were as follows:

11.1 Generation Deliverability

(Single or N-1 contingencies)

None

11.2 Multiple Facility Contingency

(Double Circuit Tower Line, Fault with a Stuck Breaker, and Bus Fault contingencies)

None

11.3 Contribution to Previously Identified Overloads

(This project contributes to the following contingency overloads, i.e. "Network Impacts", identified for earlier generation or transmission interconnection projects in the PJM Queue)

None

11.4 Steady-State Voltage Requirements

None

11.5 Potential Congestion due to Local Energy Deliverability

PJM also studied the delivery of the energy portion of this interconnection request. Any problems identified below are likely to result in operational restrictions to the project under study. The developer can proceed with network upgrades to eliminate the operational restriction at their discretion by submitting a Merchant Transmission Interconnection request.

Note: Only the most severely overloaded conditions are listed below. There is no guarantee of full delivery of energy for this project by fixing only the conditions listed in this section. With a Transmission Interconnection Request, a subsequent analysis will be performed which shall study all overload conditions associated with the overloaded element(s) identified.

None

11.6 System Reinforcements

None

12 Short Circuit Analysis

The following Breakers are overdutied

None

13 Stability and Reactive Power Requirements for Low Voltage Ride Through

(Summary of the VAR requirements based upon the results of the dynamic studies)

To be evaluated during the Facilities Study Phase

14 Affected Systems

14.1 TVA

TVA Impacts to be determined during later study phases (as applicable).

14.2 Duke Energy Progress

Duke Energy Progress Impacts to be determined during later study phases (as applicable).

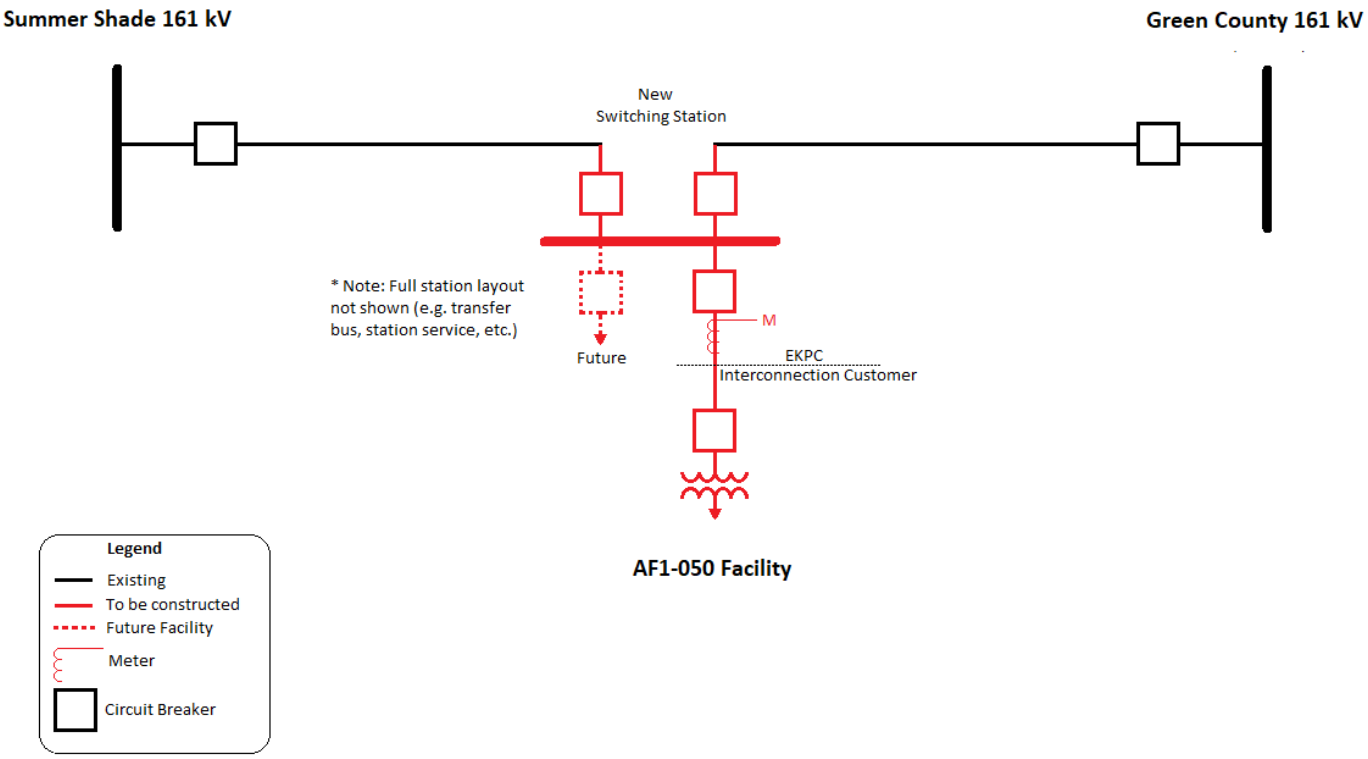
14.3 MISO

MISO Impacts to be determined during later study phases (as applicable).

14.4 LG&E

An LG&E Affected System Study will be required. PJM has identified several EKPC-LG&E tie line overloads with limiting equipment on the LG&E side. LG&E will need to determine if LG&E upgrades are required.

15 Attachment 1: One-Line Diagram



Attachment I

Economic Report

Paul A. Coomes, Ph.D.
Consulting Economist
3604 Trail Ridge Road Louisville KY 40241 502.608.4797 coomes.economics@gmail.com
Emeritus Professor of Economics, University of Louisville

December 7, 2020

TO: Carson Harkrader
Horseshoe Bend Solar, LLC
400 W. Main St, Suite 503
Durham, NC 27701
www.carolinasolarenergy.com

FROM: Paul Coomes

RE: Economic and fiscal impact of the Horseshoe Bend solar energy project

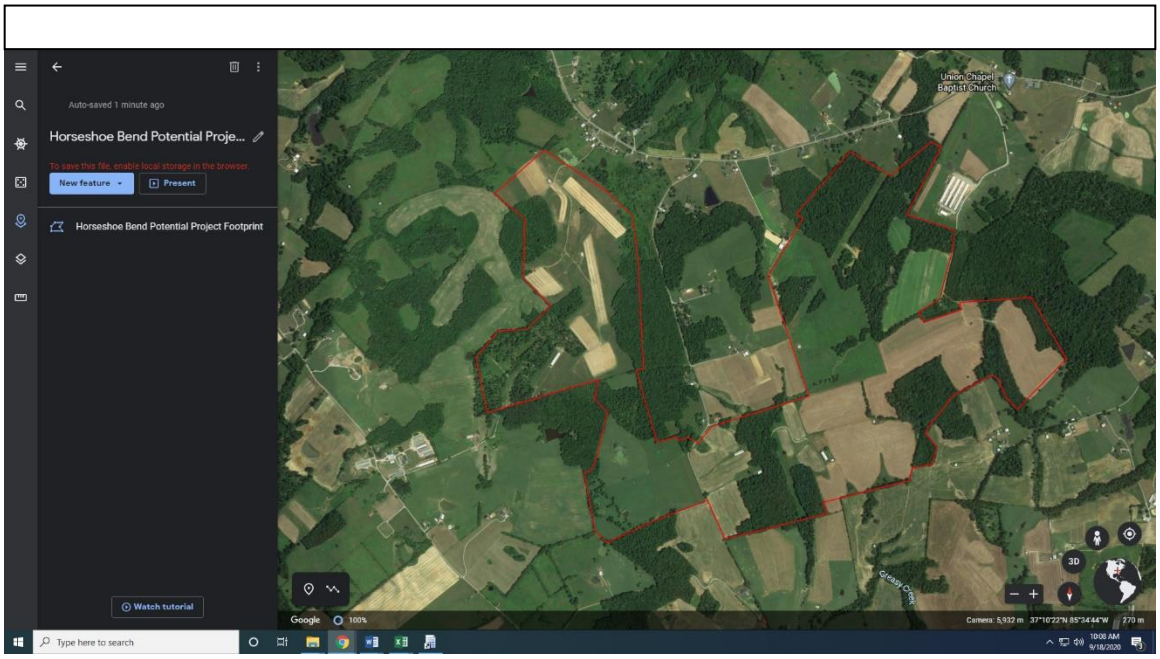
This note provides estimates of the new economic and fiscal activity expected from the proposed Horseshoe Bend solar energy project near Exie in Green County, Kentucky. Horseshoe Bend Solar, LLC is developing the 500+ acre site, which will have an electricity generation capacity of 60 megawatts. The company anticipates an investment of approximately $90-$120 million. The company and the County government are negotiating a financial agreement in which, if agreed and signed, the company will make annual payments in lieu of taxes (PILOT) to local government jurisdictions. The project is described on the company's website[1].

There are two primary impacts expected from the project. First, there will be a one-time spike in construction and linked jobs as the site is constructed over approximately one year. Second, there will be four decades of new tax (PILOT) payments to local jurisdictions in Green County due to the increased value of real estate and the new tangible property installed at the site. Using company estimates of construction jobs and payroll, I estimate that there will be a total of 186 new jobs in the County in year one, with new payroll of $9.92 million. And, the PILOT agreement will result in $1.44 million in payments to County jurisdictions over the next forty years.

[1] See: www.carolinasolarenergy.com/projects-in-development-source/horseshoe-bend

The site

The site is near Exie, about ten miles southwest of the County seat in Greensburg and is currently in agricultural and sparse residential use. One can see in the Google Earth view below the farmland, homes, and Kentucky Highway 218.



Construction phase

The company expects to invest over $90 million in the solar project. The investment involves land acquisition, site preparation, solar panel and electrical equipment installation, plus landscaping and security fencing. ENGIE North America, likely to be the owner of the project, will hire a construction company for this project, and estimates that that it will require up to 150 workers over 8-12 months, with a payroll of $7.5 million. It is not possible to know precisely the ultimate number of construction-related jobs, since many subcontractors will be involved, each with their own decisions to make about staffing. The subcontractors, for example, may choose to use fewer highly skilled workers or more less-skilled workers, depending on local labor market conditions. I use the ENGIE estimate, as they have global experience with solar farm developments. Their estimates imply an average annual pay of $50,000 per construction job.

Occupations include construction managers, earth grader operators, panel installers, electricians, and fencers. I searched the federal database on hundreds of occupations to learn how much these workers are likely to earn on the project. There is no listing in the Kentucky data for “Solar Photovoltaic Installer”, but the national average annual wage is

$46,850[2]. Good inferences about other relevant occupations can be gleaned from the next table. The construction managers are likely to earn over $80,000, heavy equipment operators around $50,000, installers around $45,000, electricians around $53,000, and fencers $30,000. These data suggest that the $50,000 average pay assumed for construction jobs is reasonable. The average annual pay for all jobs in Green County in 2018 was $30,427.

Kentucky Wages for Related Occupations, 2019

Occupation (SOC code)	Employment	Hourly mean wage	Annual mean wage
Construction Managers(119021)	1,770	$40.18	$83,570
Operating Engineers and Other Construction Equipment Operators(472073)	4,670	$24.72	$51,410
Electricians(472111)	9,880	$25.69	$53,440
Fence Erectors(474031)	250	$14.47	$30,090
Industrial Engineers(172112)	5,590	$38.69	$80,480
Materials Engineers(172131)	260	$38.36	$79,790
Mechanical Engineers(172141)	4,180	$39.57	$82,300
Heating, Air Conditioning, and Refrigeration Mechanics and Installers(499021)	4,290	$20.57	$42,780
Electrical Power-Line Installers and Repairers(499051)	2,680	$29.95	$62,300
Telecommunications Line Installers and Repairers(499052)	1,090	$22.95	$47,740

Source: US Bureau of Labor Statistics, Occupational Employment Survey, https://data.bls.gov/oes/#/home

Spin-off impacts

The construction phase will have some spin-off effects in Green County. I model this using a custom IMPLAN model of the County[3]. The relevant sector for the construction phase is number 52, "Construction of new power and communication structures", and this can be used to model the initial investment. The likely owner expects construction to last approximately one year and to support up to 150 jobs in the County, with a payroll of $7.5 million. This is the direct effect.

The model has detailed information about the inter-industry linkages in each regional economy, as well as the expected household spending on retail goods and services due to the enhanced employee compensation. When there is new industrial activity in a region, the model can predict how much of the supply chain can be met by local businesses and how much the new payroll will result in additional sales by local businesses. Adding these two effects to the direct effect yields the total effect of a

[2] See www.bls.gov/ooh/construction-and-extraction/solar-photovoltaic-installers.htm#tab-1 , with details in the lookup database https://data.bls.gov/oes/#/home , Standard Occupational Code #472231 as of May 2019.

[3] For documentation of IMPLAN modeling, see www.implan.com/history/ .

development, and dividing the total effect by the direct effect yields a multiplier. Using the Green County multipliers for the relevant construction sector, and the assumed direct construction budget, I project there will be a total of 186 new jobs in the County, and new payroll of $9.92 million.

The will also be some modest spin-off impacts from ongoing operations. The company expects operations to support only two or three jobs. Unfortunately, for the operations phase, the relevant IMPLAN sector, number 42, "Electric Power Generation – Solar", is empty of data and results for Green County. This is because there is no history of solar electricity generation and therefore no basic economic data to construct industry relationships. A reasonable recourse is to tap the literature on solar project impacts, find comparable places, and use other studies to estimate the likely operational impacts on local economies in Kentucky. For example, the Shugart solar farm in Maryland was studied extensively, and analysts projected that annual operations will support a total of only four jobs in the County (including modest spinoff activity)[4]. Thus, ongoing annual economic impacts are expected to be very small relative to the one-time impacts of construction.

Local tax revenues, IRB, PILOT agreement

Green County levies property taxes on real estate and tangible property. The table below provides the latest tax rates that are applied County-wide. They total about one

Green County Property Tax Rates, 2019

in cents per $100 valuation

Jurisdiction	Real Estate	Tangible Personal
Ambulance	10.0000	10.0000
Extension Services	5.5840	8.1385
Fiscal Court - General	10.4000	10.4000
Health Department	3.4000	3.4000
Library	8.8000	15.0000
Public Schools	53.7000	53.7000
Total, County-wide	91.8840	100.6385

Source: Kentucky Department of Revenue

[4] See pages 13-14 of the July 31, 2019 study of the Shugart, Maryland project: https://mde.maryland.gov/programs/Water/WetlandsandWaterways/Documents/Solar/Shugart-Solar-Socio-Economic-Justification-Report-FINAL.pdf

percent of the assessed value of property. The only other taxing jurisdiction in the County is the City of Greensburg, but the Horseshoe Bend project is outside the City boundary and thus would not subject to those property taxes. Also, because the project is outside the City, the payroll from construction jobs and any net profits from ongoing operations will not be subject to the City occupational license fee and net profits tax, both with a rate of one percent.

The County and the company are negotiating an Industrial Revenue Bond (IRB) and a Payment in Lieu of Taxes (PILOT) agreement, whereby the company makes annual payments to the County jurisdictions. The draft agreement calls for payments of $1,000 per megawatt of stated capacity for twenty years, then $200 per MW for the next twenty years. With a capacity of 60MW, this implies the company will pay $1.44 million to the County over the next forty years. It should be pointed out that solar projects like this require almost no public services from local government; and because they require so few people to operate do not add students and expenses to the local public school system.

Attachment J

Site Assessment Report

*Site Assessment Report contained in Volume 2

Attachment K
Horseshoe Bend Solar, LLC Certificate of Authority

1099922.06	vmiller ADD
Michael G. Adams Kentucky Secretary of State Received and Filed: 6/11/2020 10:38 AM Fee Receipt: $90.00	

COMMONWEALTH OF KENTUCKY
MICHAEL ADAMS, SECRETARY OF STATE

Division of Business Filings P.O. Box 718 Frankfort, KY 40602 (502) 564-3490 www.sos.ky.gov	**Certificate of Authority** (Foreign Business Entity)	**FBE**

Pursuant to the provisions of KRS 14A and KRS 271B, 273, 274,275, 362 and 386 the undersigned hereby applies for authority to transact business in Kentucky on behalf of the entity named below and, for that purpose, submits the following statements:

1. The entity is a :
- ☐ profit corporation (KRS 271B)
- ☐ business trust (KRS 386).
- ☐ limited partnership (KRS 362).
- ☐ non-profit llc (KRS 275)
- ☐ nonprofit corporation (KRS 273)
- ☒ limited liability company (KRS 275)
- ☐ ltd cooperative assn. (KRS)
- ☐ cooperative assn. (KRS)
- ☐ professional service corporation (KRS 274)
- ☐ professional limited liability company (KRS 275)
- ☐ statutory trust
- ☐ unincorporated association

2. The name of the entity is Horseshoe Bend Solar, LLC
(The name must be identical to the name on record with the Secretary of State.)

3. The name of the entity to be used in Kentucky is (if applicable): Horseshoe Bend Solar, LLC
(Only provide if "real name" is unavailable for use; otherwise, leave blank.)

4. The state or country under whose law the entity is organized is North Carolina.

5. The date of organization is 7/3/2019 and the period of duration is _____.
(If left blank, duration is considered perpetual.)

6. The mailing address of the entity's principal office is

400 W. Main Street	Durham	NC	27701
Street Address	City	State	Zip Code

7. The street address of the entity's registered office in Kentucky is

333 W. Vine Street, Suite 1500	Lexington	KY	40507
Street Address (No P.O. Box Numbers)	City	State	Zip Code

and the name of the registered agent at that office is James W. Gardner.

8. The names and business addresses of the entity's representatives (secretary, officers and directors, managers, trustees or general partners):

Name	Street or P.O. Box	City	State	Zip Code
Carson Harkrader	400 W. Main Street	Durham	NC	27701

9. If a professional service corporation, all the individual shareholders, not less than one half (1/2) of the directors, and all of the officers other than the secretary and treasurer are licensed in one or more states or territories of the United States or District of Columbia to render a professional service described in the statement of purposes of the corporation.

10. I certify that, as of the date of filing this application, the above-named entity validly exists under the laws of the jurisdiction of its formation.

11. If a limited partnership, it elects to be a limited liability limited partnership. Check the box if applicable: ☐

12. If a limited liability company, check box if manager-managed: ☐

13. This application will be effective upon filing, unless a delayed effective date and/or time is provided.
The effective date or the delayed effective date cannot be prior to the date the application is filed. The date and/or time is _____.

Please indicate the Kentucky county in which your business operates:
County: Green

To complete the following, please shade the box completely.

Please indicate the size of your business:
- ☐ Small (Fewer than 50 employees)
- ☐ Large (50 or more employees)

Please indicate whether any of the following make up more than fifty percent (50%) of your business ownership:
- ☑ Women-Owned
- ☐ Veteran Owned
- ☐ Minority Owned

Please indicate which of the following best describes your business:
- ☐ Agriculture
- ☐ Mining
- ☐ Services
- ☐ Construction
- ☐ Wholesale Trade
- ☐ Retail Trade
- ☐ Manufacturing
- ☐ Finance, Insurance, Real Estate
- ☐ Public Administration
- ☑ Transportation, Communications, Electric, Gas, Sanitary Services
- ☐ Other

Signature of Authorized Representative	Carson Harkrader, CEO Printed Name & Title	June 9, 2020 Date

I, James W. Gardner, consent to serve as the registered agent on behalf of the business entity.
Type/Print Name of Registered Agent

Signature of Registered Agent	James W. Gardner Printed Name	Attorney Title	6/10/20 Date

(1/20)