CASE No. 2021-00127 RHUDES CREEK SOLAR, LLC

RESPONSES TO SITING BOARD'S FIRST REQUEST FOR INFORMATION

- 1. Refer to the Application, Attachment A (Two-Mile Vicinity Map).
- a. Explain whether these neighborhoods have been identified using the definition in KRS 278.700.
- b. Describe the number of neighborhoods identified, including the number within the two-mile radius and the number outside it.
- c. Provide a new map (or an updated and zoomed in version of this map) that includes the following additions: 1,000-foot radius, 2,000-foot radius, one-mileradius, locations of individual homes that are not part of the identified residential neighborhoods (such as are depicted in Attachment 19 of the Site Assessment Report (SAR)), location of project substation and interconnection point, and location of proposedtransmission line.

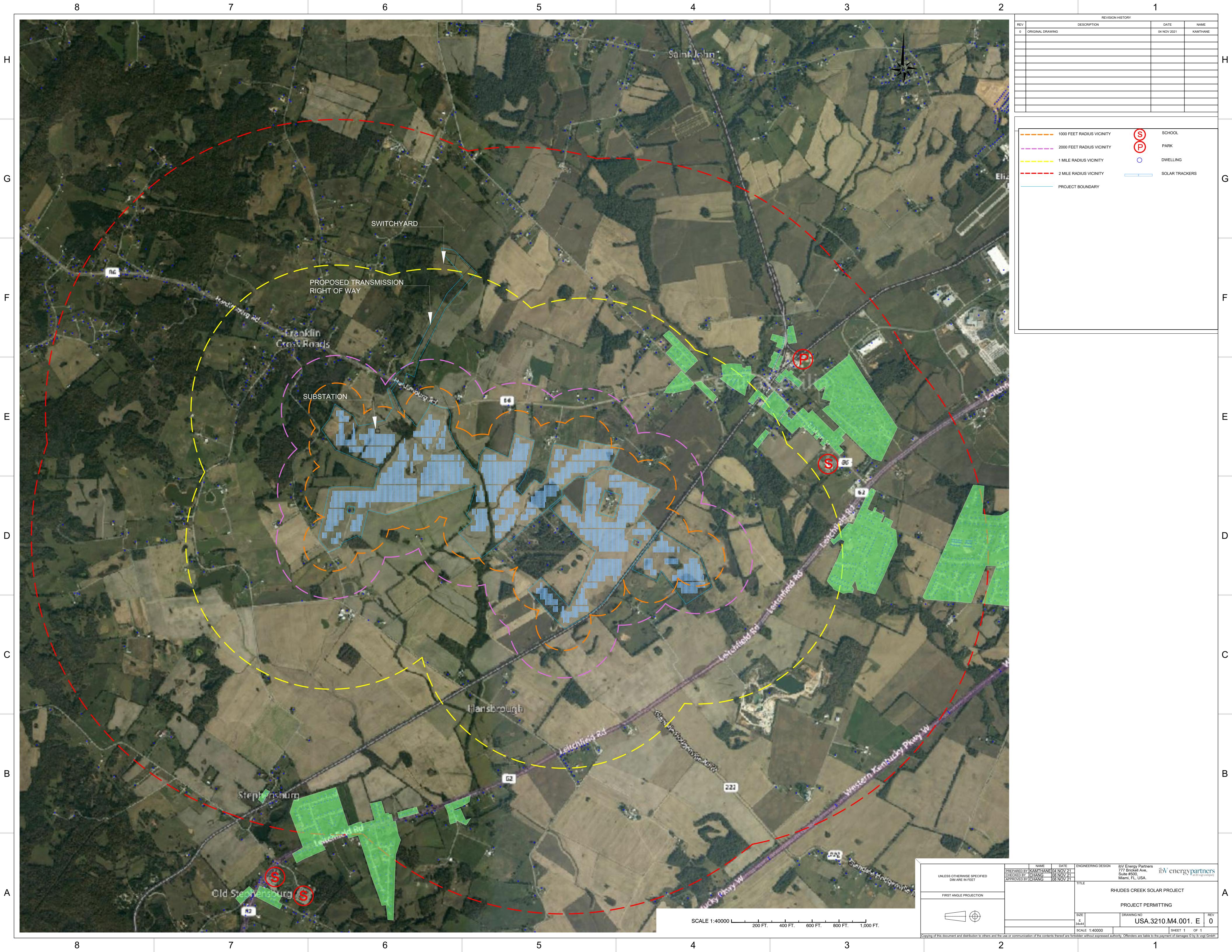
Response:

- a. Yes, the neighborhoods identified in Attachment A of the Application were selected based on the definition KRS 278.700, which states: "Residential neighborhood" means a populated area of five (5) or more acres containing at least one (1) residential structure per acre." The neighborhoods identified are not based on property parcel acreage, they are based on residential structure density.
- b. There were a total of four residential neighborhoods identified. These include the neighborhood surrounding Main Street in the town center of unincorporated Cecilia; the Leitchfield Loop neighborhood west of US-62/Leitchfield Road; the Cecilia Smiths Mill Road neighborhood northwest of Western Kentucky Parkway; and, the Stephensburg neighborhood adjacent to West Hardin Middle School and Lakewood Elementary School. The requested map is attached.

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c. The map has been revised to incorporate radii, residential homes, the project substation, transmission route, and point of interconnection.

Witness: Jeffrey Chang



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2. Refer to the SAR, Attachment 1 (Site Development Plan). Describe the number of entrances to the site (including during both construction and operational phases). Explain and identify images in Attachment 1 that depict the project's site entrances.

Response: There are a total of five planned driveways for the construction and operation of Rhudes Creek Solar in which two are existing driveways that will be improved and three are newly proposed. These are listed and referenced below:

- 1. Upgrade to existing driveway for primary construction/O&M entrance and access to onsite collector substation located on KY-86/Hardinsburg Road at approximately 37.66306, -85.99706. See the C-102 Existing Conditions and C-202 Site Plan in the Rhudes Creek Solar Project Development Plans, which is Attachment 1 to the Application's Site Assessment Report.
- 2. Newly proposed driveway for construction/O&M access located on South Black Branch Road at approximately 37.65555, -85.98152. See the C-109 Existing Conditions and C-209 Site Plan in the Rhudes Creek Solar Project Development Plans.
- 3. Newly proposed driveway for construction/O&M access located on South Black Branch Road at approximately 37.65247, -85.98491. See the C-109 Existing Conditions and C-209 Site Plan in the Rhudes Creek Solar Project Development Plans.
- 4. Upgrade to existing driveway for construction/O&M access located on South Black Branch Road at approximately 37.65714, -85.97627. See the C-110 Existing Conditions and C-210 Site Plan in the Rhudes Creek Solar Project Development Plans.
- 5. Newly proposed driveway for gen-tie and planned LGE-KU switchyard located on KY-86/Hardinsburg Road at approximately 37.66542, -86.00262. See the C-120

CASE No. 2021-00127 RHUDES CREEK SOLAR, LLC RESPONSES TO SITING BOARD'S FIRST REQUEST FOR INFORMATION

Existing Conditions and C-220 Site Plan in the Rhudes Creek Solar Project Development Plans.

Witness: Jeffrey Chang

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RHUDES CREEK SOLAR, LLC

RESPONSES TO SITING BOARD'S FIRST REQUEST FOR INFORMATION

- 3. Refer to the SAR, Section 5 (Effect on Road, Railways, and Fugitive Dust).
- a. Explain the anticipated length of the project's construction phase.
- b. Detail the number and approximate weight classes of the heavy and light duty trucks anticipated on site per day during the construction phase.
- c. Provide the estimated weight of the project's required substationtransformer and the truck class necessary for its delivery.
- d. Explain the anticipated peaks in equipment deliveries, traffic to thesite, and number of workers on site across the duration of the construction phase.

Response:

- a. The estimated length of the project's construction phase is 10-12 months
 from breaking ground to commissioning.
- b. The number and approximate weight classes of the trucks anticipated on site per day during the construction phase are as follows:

Five Class 2 trucks

Four Class 4 trucks

Four Class 6 trucks

Two Class 7 trucks

Ten Class 8 Tractor Trailers per day only during the two-month delivery phase.

- c. Approximately 140 tons Using a Grove GRT9165 Rough Terrian Crane
- d. Deliveries will peak in the first 3 month of construction. Employees arriving to the site will carpool, likely in 5 or 6 vans per day for pickup and delivery.

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RESPONSES TO SITING BOARD'S FIRST REQUEST FOR INFORMATION

- e. The peak number of workers anticipated to be on site will be between 125-
- 150. We anticipate the average number of employees will be 75-100 during non-peak times.

Witness: Alexander Gregory

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RESPONSES TO SITING BOARD'S FIRST REQUEST FOR INFORMATION

4. Describe all discussions and provide all correspondence between Rhudes Creek Solar and the Kentucky Transportation Cabinet District 4 Engineer regarding road weight ratings for heavy deliveries to the site and any anticipated road/shoulder damage or mitigation measures. Specify date, persons in the conversation, and substance of the conversation.

Response:

- March 29, 2021 ibV Energy Partners' Planning & Engineering Manager, Jeff Chang, introduced the proposed solar project to Kentucky Transportation Cabinet District 4 Permits Engineer, Jake Riggs, by email and arranged an onsite meeting to discuss highway design and traffic conditions related to the project.
- April 1, 2021 ibV Energy Partners' Jeff Chang and Robin Saiz accompanied by the landowner of the proposed transmission right-of-way met Kentucky Transportation Cabinet's Jake Riggs and Steve Peace at the project site to discuss the project and take sight distance measurements of two planned access driveways on KY-86.
- April 2, 2021 ibV Energy Partners' Jeff Chang requests a modification of recommended driveway access coordinates provided by Kentucky Transportation Cabinet's Jake Riggs in order to avoid and minimize impacts to non-jurisdictional wetlands.
- April 12, 2021 Kentucky Transportation Cabinet's Jake Riggs provided guidance on the modification and recommends at a minimum 100' of spacing between the existing driveway of the adjoining property and the newly proposed driveway for the gentie and switchyard access road. Jake Riggs also provided the permit form for driveways

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RHUDES CREEK SOLAR, LLC

RESPONSES TO SITING BOARD'S FIRST REQUEST FOR INFORMATION

along with recommendations for roadway construction in wet areas.

April 20, 2021 - Kentucky Transportation Cabinet's Jake Riggs provided

guidance on culvert design and permit forms for overhead and underground utility

crossings.

June 3, 2021 - ibV Energy Partners' Jeff Chang and Alex Gregory

accompanied by prospective EPC contractors met Kentucky Transportation Cabinet's

Jake Riggs and Steve Peace on site to discuss any questions from EPC contractors.

The email correspondence, ibV-KYTC Correspondence, has been provided

for reference.

Witness: Jeffery Chang

From: Riggs, Jacob A (KYTC-D04)

To: <u>Jeffrey Chang</u>

Cc: Peace, Steve A (KYTC-D04)

Subject: RE: KY Rhudes Creek Solar Project Introduction

Date: Thursday, May 27, 2021 3:29:48 PM

Attachments: <u>image001.png</u>

Sounds good Jeff, we'll catch you then

Thanks

Jake

Jacob Riggs, PE District 4 Permits O – 270.766.5066

From: Jeffrey Chang <jeffrey.chang@ibvenergy.com>

Sent: Thursday, May 27, 2021 9:55 AM

To: Riggs, Jacob A (KYTC-D04)

Cc: Peace, Steve A (KYTC-D04)

Subject: RE: KY Rhudes Creek Solar Project Introduction

Great, thank you. Let's plan for 10a on Thursday at Clayton Grey's property (https://goo.gl/maps/QaFmdsQGQaJ1orkL7).

Best,

Jeff

From: Riggs, Jacob A (KYTC-D04)

Sent: Thursday, May 27, 2021 9:52 AM

To: Jeffrey Chang < jeffrey.chang@ibvenergy.com >
Cc: Peace, Steve A (KYTC-D04)
Subject: RE: KY Rhudes Creek Solar Project Introduction

Either Steve, or myself, or both of us can meet you out there next Thursday.

How about 10AM?

Thanks

From: Jeffrey Chang < jeffrey.chang@ibvenergy.com >

Sent: Thursday, May 27, 2021 9:48 AM

To: Riggs, Jacob A (KYTC-D04) **Subject:** RE: KY Rhudes Creek Solar Project Introduction

Hi Jake, that's no worries at all. Next week works as well. We plan to tour the site with other EPC contractors on Thursday next week. Please let me know if that could work for you. Otherwise, we can continue coordinating digitally.

Thanks sir,

Jeff

From: Riggs, Jacob A (KYTC-D04)

Sent: Thursday, May 27, 2021 9:42 AM

To: Jeffrey Chang < jeffrey.chang@ibvenergy.com > **Subject:** RE: KY Rhudes Creek Solar Project Introduction

Jeff,

I took off Tuesday and have been playing catch up ever since. Are you still near the site today?

I've got a meeting at 1030, then lunch, but could come out at lunch.

Sorry I didn't see this until now.

Thanks

Jake

Jacob Riggs, PE
District 4 Permits
O – 270.766.5066

From: Jeffrey Chang < jeffrey.chang@ibvenergy.com >

Sent: Tuesday, May 25, 2021 3:46 PM



Subject: RE: KY Rhudes Creek Solar Project Introduction

CAUTION PDF attachments may contain links to malicious sites. Please contact the COT Service Desk ServiceCorrespondence@ky.gov for any assistance.

Hi Jake, good afternoon and greetings from E-town. Last week, we submitted the 90% design package to the County for our CUP application. We are underway with the crossing and encroachment permits for the various roads, utilities, and RR lines. I've attached the latest details regarding the new proposed and the existing improved driveways on KY-86. We are currently working through the details for the transmission line, and will submit the full application once finalized.

This week, we're here meeting with potential EPC contractors for the project execution phase, and they'd greatly appreciate introductions to KYTC. Do you and/or Steve have time tomorrow to meet us on site at https://goo.gl/maps/QaFmdsQGQaJ1orkL7 to continue the discussion with the EPC contractors? If so, please let me know a good time.

Thanks, and look forward to touching base.

Best,

Jeff

Jeffrey C. Chang

Planning & Engineering Manager

ibV Energy Partners

777 Brickell Ave. Suite 500 | Miami, FL 33131 984.238.4284 | Jeffrey.chang@ibvenergy.com

Home Office: Raleigh, NC

From: Riggs, Jacob A (KYTC-D04)

Sent: Tuesday, April 20, 2021 10:41 AM

To: Jeffrey Chang < <u>ieffrey.chang@ibvenergy.com</u>>

Cc: Peace, Steve A (KYTC-D04) ; LaSusa, Tyler

Zanghi, Martin

Subject: RE: KY Rhudes Creek Solar Project Introduction

Jeff,

We shoot for at least 4:1 conditions on the ditch line, so ideally if the bottom of the ditch is 2' deep, it

would be 8' off the edge pavement. However, flatter is fine, so 12' off the edge of pavement would be great. We're not overly hard to please, so don't fill like you need to draw up plans or anything, just as long as the slope shoots for that 4:1 and it drains water you'll be fine.

Yes, you can actually just add that overhead crossing onto the permit you are filling out. We'll approve it all together. At least 18' clearance. No poles or anchors on state right of way, they must be on private property. I attached the detail you can send back with the permit.

If you need to bore under the state road, I attached a bore detail. Just a minimum of 42" under the road. Nothing needed from us if the wires are on private property, just talking about what's on the State portion.

Have a great day

Thanks

Jake

From: Jeffrey Chang < <u>ieffrey.chang@ibvenergy.com</u>>

Sent: Tuesday, April 20, 2021 9:55 AM

To: Riggs, Jacob A (KYTC-D04)

Cc: Peace, Steve A (KYTC-D04) >; LaSusa, Tyler

Zanghi, Martin >

Subject: RE: KY Rhudes Creek Solar Project Introduction

Hi Jake and Steve, good morning. A couple of follow-up questions for you:

- 1. Do you have a culvert specifications for the driveway ditch?
- 2. Are there any encroachment permits for crossing with overhead lines? I recall that we just need to be outside of the ROW and at least 18' over grade, but would like to confirm.
- 3. Are there any encroachment permits in the case that cables need to go underground?

Thanks very much,

Jeff

From: Riggs, Jacob A (KYTC-D04)

Sent: Monday, April 12, 2021 2:56 PM

To: Jeffrey Chang < jeffrey.chang@ibvenergy.com >

Cc: Peace, Steve A (KYTC-D04)

Subject: RE: KY Rhudes Creek Solar Project Introduction

Jeff,

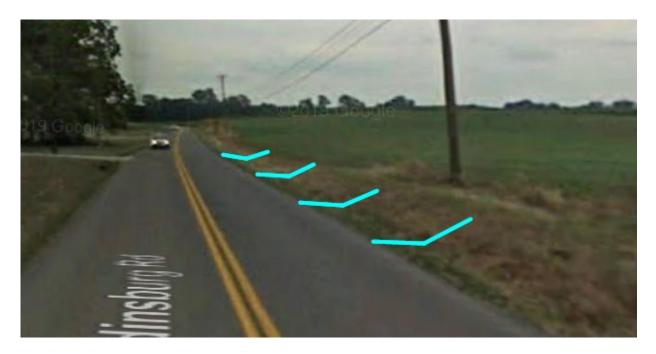
I'm fine with 100' of spacing center to center from that existing driveway. Just fill out the attached permit, scan and email it back to me. Steve will take it from there. It doesn't sound like they'll be as much construction on this side for the transmission line as their will be for the solar panel side. I'll tell you what we suggest for the "road" going back to the transmission line, but it's actually up to you, once you are on private property, you can do whatever you want, rock is pretty cheap in Ky, and I'm sure you will do a great job with it.

Steve recommends that he would start off with geotextile fabric to keep silt out of rock and it helps spread to load of the rock. Steve mentioned they've used rip rap before about 12" thick, then about a 3" layer of #3's and then about 4" of DGA, in super wet areas with success. After you get out of that wet area, you could probably use fabric, #3's and DGA and have a pretty beefy road back there.

For that second entrance, on the right heading back towards Elizabethtown, it doesn't look like it on Google, but there is just a little bluff at the crest of that hill by the telephone pole that blocks sight distance for the last 50' coming out of the existing entrance.

When you have your contractor there working, have them flatten out the little bluff, and then you'll have a legitimate full sight distance entrance. Ideally those slopes would be 4:1 and need to be seeded and strawed and you'll have a "V" ditch all the way thru.

Just the one permit for both spots will be fine. Let me know if you have any questions. Fine meeting your contractor in the field if needed.



Thanks

Jake

Jacob Riggs, PE District 4 Permits O – 270.766.5066

From: Jeffrey Chang < jeffrey.chang@ibvenergy.com >

Sent: Friday, April 2, 2021 10:22 AM

To: Riggs, Jacob A (KYTC-D04) <

Cc: Robin Saiz <<u>robin.saiz@ibvenergy.com</u>>; Michael Barry <<u>michael.barry@ibvenergy.com</u>>; Zanghi,

Martin ; Geremew, Dagmawi

Subject: RE: KY Rhudes Creek Solar Project Introduction

Hi Jake, good morning and thanks for coming out onsite to help with the driveway placement. I realized back at my computer one of the primary reasons for the access point directly adjacent to the neighbors was due to the wetland identified. Could we touch base on this next week in more detail and determine how best to address?

Thanks, and have a great weekend.

Jeff

Jeffrey C. Chang

Planning & Engineering Manager

ibV Energy Partners

777 Brickell Ave. Suite 500 | Miami, FL 33131 984.238.4284 | Jeffrey.chang@ibvenergy.com

Home Office: Raleigh, NC

From: Riggs, Jacob A (KYTC-D04)

Sent: Thursday, April 1, 2021 9:53 AM

To: Jeffrey Chang < <u>ieffrey.chang@ibvenergy.com</u> > **Subject:** Re: KY Rhudes Creek Solar Project Introduction

Jeff, I'm on the way, just left a long winded guy, running about 5 minutes late probably but I'll be there in just a minute.

Thanks

Jake	e Rig	gs
	Perm	

From: Jeffrey Chang < jeffrey.chang@ibvenergy.com>
Sent: Wednesday, March 31, 2021 4:20:35 PM
To: Riggs, Jacob A (KYTC-D04)

Subject: RE: KY Rhudes Creek Solar Project Introduction

Hi Jake, good afternoon. We are good to go onsite tomorrow at Dave Peterson's. To access his property, we will need to go up his neighbor's driveway at 3698 Hardinsburg Rd and to the right by the farm pond.

Thanks, and look forward to meeting you.

Best,

Jeff

Jeffrey C. Chang Planning & Engineering Manager

ibV Energy Partners 777 Brickell Ave. Suite 500 | Miami, FL 33131 984.238.4284 | Jeffrey.chang@ibvenergy.com

Home Office: Raleigh, NC

From: Riggs, Jacob A (KYTC-D04)

Sent: Tuesday, March 30, 2021 11:19 AM

To: Jeffrey Chang < <u>jeffrey.chang@ibvenergy.com</u>> **Subject:** RE: KY Rhudes Creek Solar Project Introduction

Sounds good, got it on my calendar just let me know that morning.

Thanks

Jake

From: Jeffrey Chang < jeffrey.chang@ibvenergy.com >

Sent: Tuesday, March 30, 2021 11:06 AM

To: Riggs, Jacob A (KYTC-D04)

Cc: Robin Saiz <<u>robin.saiz@ibvenergy.com</u>>; Michael Barry <<u>michael.barry@ibvenergy.com</u>>; Zanghi,

; Hach, Ben < >; Trainor, Barbara

Subject: RE: KY Rhudes Creek Solar Project Introduction

Hi Jacob, thanks for the heads up. That would be great to meet you on site. Let me coordinate with the landowner first as we need to access the property through the neighbor's driveway. Otherwise, 10a at your office on Thursday works well.

Best,

Jeff

Jeffrey C. Chang

Planning & Engineering Manager

ibV Energy Partners

777 Brickell Ave. Suite 500 | Miami, FL 33131 984.238.4284 | Jeffrey.chang@ibvenergy.com

Home Office: Raleigh, NC

From: Riggs, Jacob A (KYTC-D04)

Sent: Tuesday, March 30, 2021 10:59 AM

To: Jeffrey Chang < <u>ieffrey.chang@ibvenergy.com</u>>

Cc: Robin Saiz < <u>robin.saiz@ibvenergy.com</u>>; Michael Barry < <u>michael.barry@ibvenergy.com</u>>; Zanghi, Martin < Hach, Ben ; Trainor, Barbara

Subject: RE: KY Rhudes Creek Solar Project Introduction

Thursday would be fine with me. How about 10 AM?

I can meet on site just tell me where, or we can meet at our office, the Dep. Of Highways. 634 E Dixie Highway, Elizabethtown KY 42701

Thanks

Jake

Jacob Riggs, PE District 4 Permits O – 270.766.5066

From: Jeffrey Chang < <u>ieffrey.chang@ibvenergy.com</u>>

Sent: Monday, March 29, 2021 5:58 PM

To: Riggs, Jacob A (KYTC-D04)

Cc: Robin Saiz < robin.saiz@ibvenergy.com; Michael Barry < michael.barry@ibvenergy.com; Zanghi, Martin < michael.barry@ibvenergy.com; Trainor, Barbara

Subject: KY Rhudes Creek Solar Project Introduction

Hi Jacob, good evening. My name is Jeff Chang, and I am reaching out about our solar project in Hardin County that's under development. We have been working with Adam King (Hardin County Planner) and Charlie Allen (Hardin County Engineer) on the site plans of the project. I will be in Elizabethtown from Tuesday to Friday, and would like to make introductions and talk through highway design and traffic conditions on KY-86. Could you please let me know if you're available to meet and where you're located? If this week doesn't work out, we could set up a follow-up call.

Thanks,

Jeff

Jeffrey C. Chang

Planning & Engineering Manager

ibV Energy Partners 777 Brickell Ave. Suite 500 | Miami, FL 33131 984.238.4284 | Jeffrey.chang@ibvenergy.com

Home Office: Raleigh, NC

CASE No. 2021-00127 RHUDES CREEK SOLAR, LLC

RESPONSES TO SITING BOARD'S FIRST REQUEST FOR INFORMATION

5. Describe all discussions and provide all correspondence between Rhudes Creek Solar and the Hardin County road department regarding the proposed project, traffic impacts, and heavy deliveries to site. Specify date, persons in the conversation, and substance of the conversation.

Response:

- March 29, 2021 ibV Energy Partners' Jeff Chang reached out to Hardin County Road Department's Dwight Morgan and Michael Steck to introduce the project and request an in-person review.
- April 2, 2021 ibV Energy Partners' Jeff Chang went to the Hardin County Road Department's 501 Bacon Creek Road office in Elizabethtown to pick up flags to mark proposed driveway accesses along county road, South Black Branch Road.
- April 9, 2021 ibV Energy Partners' Jeff Chang informed Hardin County Road Department's Dwight Morgan and Michael Steck that the proposed driveway accesses had been flagged for review.
- April 15, 2021 Hardin County Road Department's April Ogletree
 provided the County Road Department guidance document, Encroachment Permit
 Information.

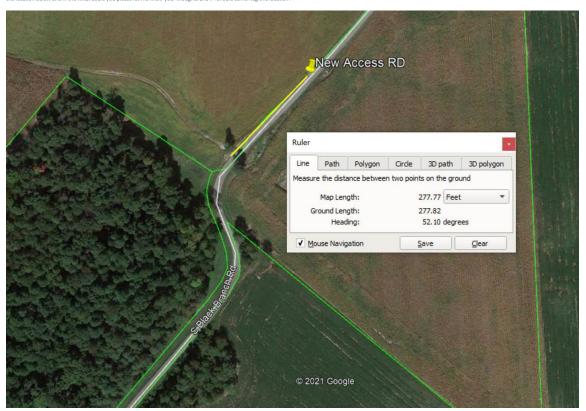
April 29 2021 – Following onsite review, Hardin County Road Department's Dwight Morgan informed ibV Energy Partners' Jeff Chang that two of the proposed driveway accesses did not meet sight distance requirements. Subsequently, Jeff Chang worked with TRC's site civil consulting team to reconfigure the access roads to be in compliance with site distance requirements.

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• The email correspondences, ibV-Hardin County Road Department Correspondence 1 and 2, have been provided for reference.

Witness: Jeffrey Chang

Hi Dwight, good evening. Thanks for the input. I worked with the civil team today to reconfigure, and have gotten rid of both of the existing driveways. Instead, we would offset ~275′ from the NE tangent of the corkscrew on the west side of S Black Branch to the location below and in the KMZ. Could you please let me know your thoughts and if I should come flag this location?



Thanks for considering.

From: Dwight Morgan
Sent: Thursday, April 29, 2021 10:03 AM
To: Jeffrey Chang <jeffrey.chang@ibvenergy.com>
Subject: RE: KY Rhudes Creek Solar Project Introductions

No they cannot, even with the setbacks the concern for me would be the future growth of any vegetation.

From: Jeffrey Chang <ieffrey.chang@ibvenergy.com>
Sent: Thursday, April 29, 2021 9:59 AM
To: Dwight Morgan
Subject: RE: KY Rhudes Creek Solar Project Introductions

Ok, thanks for the heads up. I know we plan to have trees removed in this area for the installation of panels, fencing, and even reen landscaping. Please let me know if these driveways could be permitted with proper setbacks.

Best,

From: Dwight Morgan

Sent: Thursday, April 29, 2021 9:34 AM

To: Jeffrey Chang <ieffrey.chang@lbvenergv.com>
Subject: RE: KY Rhudes Creek Solar Project Introductions

The following two locations do not meet sight distance requirements: 37°39'15.4"N 85°58'56.3"W, 37°39'18.1"N 85°58'56.1"W



From: Jeffrey Chang <ieffrey.chang@ibv
Sent: Thursday, April 29, 2021 9:23 AM
To: Dwight Morgan <
Cc: Adam C. King <a >; Cl
Subject: RE: KY Rhudes Creek Solar Proje

; Michael Steck

>; Charlie Allen ar Project Introductio

Hi Dwight, could you please confirm that this was the access driveway with sight distance issues and will not be permitted?



From: Jeffrey Chang Sent: Wednesday, April 28, 2021 9:28 AM

Cc: Adam C. King >; Charlie Allen < Subject: FW: KY Rhudes Creek Solar Project Introduction

Hi Dwight, thanks for the call this morning. Please see below the referenced email from earlier this month. Our CUP hearing with P&Z is currently scheduled for June 15th, and we'd greatly appreciate your input in preparation for our hearing.

Best,

From: Jeffrey Chang Sent: Friday, April 9, 2021 10:37 AM

Hi Dwight and Michael, good morning. Last week, I stopped in to pick up yellow flags from April and put them out on our proposed access driveways on S Black Branch for the Rhudes Creek Solar project. Three are existing and one is new.

Starting from the northeast at the KY-86 junction, we would like to utilize the gravel driveway adjacent to Clayton Grey's residence located at 37:39'25.7"N 85'58'34.6"W. This is on the eastern side of S Black Branch.





Relatively close by, there is an unpaved access point with a culvert on the eastern side of the road at 37°39'15.4"N 85°58'56.3"W.



Lastly, the new proposed access driveway is on the western side of the road at 37*39'09.5"N 85*59'04.5"W.



Could you please let me know the next steps for review in the field?

Thanks very much,

Jeff

Jeffrey C. Chang Planning & Engineering Manager

ibV Energy Partners 777 Brickell Ave. Suite 500 | Miami, FL 33131 984.238.4284 | Leffrey.chang@ibvenergy.com Home Office: Raleigh, NC

From: Jeffrey Chang
Sent: Monday, March 29, 2021 6:04 PM
To
Cc: Adam C. King
>; Ch >; Robin Saiz <<u>robin.saiz@ibvenergy.com</u>>; Michael Barry <<u>michael.barry@ibvenergy.com</u>>; Zanghi, Martin < Hach, Ben r Project Introductions

Hi Dwight and Michael, good evening, My name is Jeff Chang, and I am reaching out about our solar project in Hardin County that's under development. You may have previously touched base with Steve, Wes, and Barbara. That said, we have been working with Adam King and Charlie Allen on the site plans of the project. I will be in Elizabethtown from Tuesday to Friday, and would like to make introductions and talk through highway design and traffic conditions on and around South Black Branch. Could you please let me know if you're available to meet and where you're located? If this week doesn't work out, we could set up a follow-up call.

Thanks,

Jeff

Jeffrey C. Chang Planning & Engineering Manager

ibV Energy Partners 777 Brickell Ave. Suite 500 | Miami, FL 33131 984.238.4284 | Jeffrey.chang@ibvenergy.com Home Office: Raleigh, NC

Attached is a general form that explains a few expectations for owners and contractors. Unfortunately, we do not have very much information in the form of a handout but you are more than welcome to call us with any questions you may have. We will try to answer them the best we can.

Thanks!

April Ogletree

Business Manager Hardin County Road Department 501 Bacon Creek Road Elizabethtown, KY 42701 Ph: (270) 737-6046 Fx: (270) 737-6037

From: Jeffrey Chang <jeffrey.chang@ibvenergy.com>
Sent: Thursday, April 15, 2021 2:24 PM
To: April Ogletree
Subject: FW: KY Rhudes Creek Solar Project Introductions

Hi April, it's Jeff. Thanks for the call this afternoon. Please see my contact info below along with the information sent to Dwight and Michael regarding the solar project.

leff

ibV Energy Partners 777 Brickell Ave. Suite 500 | Miami, FL 33131 984.238.4284 | Jeffrey.chang@ibvenergy.com Home Office: Raleigh, NC

From: Jeffrey Chang
Sent: Friday, April 9, 2021 10:37 AM
To:
Cc: Adam C. King

>; Robin Saiz ; Michael Barry ; Zanghi, Martin <

Hi Dwight and Michael, good morning. Last week. I stopped in to pick up vellow flags from April and put them out on our proposed access driveways on S Black Branch for the Rhudes Creek Solar project. Three are existing and one is new





Relatively close by, there is an unpaved access point with a culvert on the eastern side of the road at 37°39'15.4"N 85'58'56.3"W.



Lastly, the new proposed access driveway is on the western side of the road at 37*39'09.5"N 85*59'04.5"W.



Could you please let me know the next steps for review in the field?

Thanks very much,

Jeff

Jeffrey C. Chang Planning & Engineering Manager

ibV Energy Partners 777 Brickell Ave. Suite 500 | Miami, FL 33131 984.238.4284 | Leffrey.chang@ibvenergy.com Home Office: Raleigh, NC

From: Jeffrey Chang
Sent: Monday, March 29, 2021 6:04 PM
To: dmorgan@hcky.org; msteck@hcky.org
Cc: Adam C. King - >; Charlie Allen ->; Robin Saiz <<u>robin.saiz@ibvenergy.com</u>>; Michael Barry <<u>michael.barry@ibvenergy.com</u>>; Zanghi

Hi Dwight and Michael, good evening, My name is Jeff Chang, and I am reaching out about our solar project in Hardin County that's under development. You may have previously touched base with Steve, Wes, and Barbara. That said, we have been working with Adam King and Charlie Allen on the site plans of the project. I will be in Elizabethtown from Tuesday to Friday, and would like to make introductions and talk through highway design and traffic conditions on and around South Black Branch. Could you please let me know if you're available to meet and where you're located? If this week doesn't work out, we could set up a follow-up call.

Thanks,

Jeff

Jeffrey C. Chang Planning & Engineering Manager

ibV Energy Partners 777 Brickell Ave. Suite 500 | Miami, FL 33131 984.238.4284 | Jeffrey.chang@ibvenergy.com Home Office: Raleigh, NC

CASE No. 2021-00127 RHUDES CREEK SOLAR, LLC RESPONSES TO SITING BOARD'S FIRST REQUEST FOR INFORMATION

6. Describe all discussions and provide all correspondence between Rhudes Creek Solar and adjoining property owners or other county stakeholders regarding the proposed working hours of 6 a.m. to 9 p.m. Monday to Friday during the construction phase. Specify date, persons in the conversation, and substance of the conversation, including any feedback given to Rhudes Creek Solar from property owners and stakeholders regarding the proposed working hours.

Response: ibV Energy Partners held a public open house on October 8, 2020, at the Ruritan Club Pavilion from 5:30 to 7:30 PM. The team sent out over 60 mailed letters to landowners living within 1,250 feet of the project footprint to invite them to the event. Twenty-seven landowners showed up to the meeting.

On April 1, 2021, ibV Energy Partners held another public open house at the Ruritan Club Pavilion from 5:30 to 8 PM. ibV Energy also held a virtual town hall from 7 to 8 PM that same night. The team sent out certified letters with return receipts with the same distribution parameters as the October 2020 meeting. We received seven landowners at the public open house and four on the virtual open house.

During the meetings ibV Energy Partners explained that during the 10-12 construction months that activities would take a bell-shaped curve. Mobilization would start in month one and build to a peak in month 6 and then slowly ramp down to completion in months 10-12. We discussed the majority of construction operations would take place during the daylight working hours but some driving/hauling could take place in early morning or late afternoon/early evening. We discussed the types of construction activities to include grading, trenching, driving of piles, racking installation, module

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installation, inverter installation, transmission line construction as well as building the

project substation.

The landowners present voiced concerns about noise involved with the operation of

the inverters, viewshed concerns based on their "front porch" view, storm water runoff

from the project site and overall heat increases from the volume of solar panels in the

immediate area.

The sign-in sheets from these two in-person meetings are being submitted with a

Petition for Confidential Treatment. There may have been additional members of the

public who attended the meetings without signing in.

Witness:

Robin Saiz

SIGN-IN SHEET - RHUDES CREEK SOLAR OPEN HOUSE: 10/08/20

Name	Address	Phone or Email
John Heath		
Nicole McCanish		
lerry wind		
ared Lowey		
Clayfon Ley		
RED THOMAS		
DAN + ROS FEESER		
Clara & williago Spee	2-	
Encho = Patty Harringhan		
Leon & Trans Watfull		
Dave + Many alice Leters		
J. David Meller		
Reith and Megan Taul	2	
Jogna Taul		
JEREMY JONES		

SIGN-IN SHEET - RHUDES CREEK SOLAR OPEN HOUSE: 10/08/20

Name	Address	Phone or Email
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SIGN-IN SHEET - RHUDES CREEK SOLAR OPEN HOUSE: 10/08/20

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SIGN-IN SHEET - RHUDES CREEK SOLAR COMMUNITY MEETING: 04/01/21

Name	Address	Phone or Email
chartor Sie	4	
Bill 9/16/2		
The state of the		
Ernest Hammons		
Bennie Lui Hammons		
Jennifer Fraze, Asa Fra	aze	
Deniso & David		
John Hearth		
William Drien.		
Stone of Mary Alice	e Felerson	
Natha Highbay		
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RHUDES CREEK SOLAR, LLC

RESPONSES TO SITING BOARD'S FIRST REQUEST FOR INFORMATION

7. Refer to the SAR, Section 5 (Effect on Road, Railways, and Fugitive Dust).

Provide a full traffic study that supports this section of the SAR and its conclusions, if

anywas prepared.

Response: The effect on road, railways, and fugitive dust was assess internally

by ibV Energy Partners' Engineering & Planning Department and was based on

professional engineering judgement and assumptions for typical traffic loads and

construction equipment. However, following the issuance of this request for information,

an independent engineer has been engaged to prepare an additional study. The study is

expected to conclude by December 2021 and will be filed once completed.

Witness:

Jeffrey Chang

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8. Refer to the SAR, Section 4 (Anticipated Noise Levels). Provide a full noise

assessment that supports this section of the SAR and its conclusions.

Response: The anticipated noise level assessment was performed internally by

ibV Energy Partners' Engineering & Planning Department and was based on professional

engineering judgement, planned equipment specifications, and noise emission

calculations. However, following the issuance of this request for information, an

independent engineer has been engaged to prepare an additional study. The study is

expected to conclude by December 2021 and will be filed once completed.

Witness:

Jeffrey Chang

RHUDES CREEK SOLAR, LLC

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9. Detail any contracts by which Rhudes Creek Solar has negotiated to pay,

contracted to pay, or paid, any compensation, whether cash or otherwise, to non- participating

landowners near the project. Include the terms of that agreement and which properties are

involved in terms of distance to the project boundaries.

Response: ibV Energy Partners has not negotiated nor agreed to pay any non-

participating landowners near the project. The development team has held private one-

on-one meetings with the non-participating neighboring landowners to discuss their

concerns with the project and committed to continue to meet and consult with them in

order to satisfy viewshed issues with landscaping within reason as well as satisfy questions

regarding storm water runoff from the project. Those meetings included the following

individuals: Keith Taul, Dan Feeser, David Miller, Russell and Tiffani Tucker, Mary

Parker, Asa and Jennifer Fraze.

Witness:

Robin Saiz

10. Detail the status of any applications for zoning changes or conditional use permits that are required for this project.

Response: The Hardin County Development Guidance System Zoning Ordinance sets for zoning regulations for Hardin County. The Hardin County Planning and Development Commission ("Planning Commission") adopted Ordinance 2020-011, whereby it authorized a solar facility greater than one acre to be considered as a conditional use on land designated in the A-1 (Agricultural), I-1, or I-2 (Industrial) zones. The Rhudes Creek Solar project is planned for land that is currently zoned as R-2 (Residential). Accordingly, the land will need to be re-zoned and receive a Conditional Use Permit ("CUP") prior to construction and operation.

Following the Hardin County ordinances, Rhudes Creek previously applied for a zone change and conditional use permit with the Planning Commission. A hearing on those applications was held on June 15, 2021, during which the Planning Commission unanimously voted to approve the zone change from residential to A-1 (with a condition that some of the land would remain R-2 if the CUP was denied) and subsequently voted to deny the CUP.

On July 15, 2021, Rhudes Creek Solar filed a Petition for Declaratory Judgment and Verified Complaint and Appeal ("Petition for Declaratory Judgment") in the Hardin Circuit Court. This case was docketed as Case No. 21-CI-994. In the Petition for Declaratory Judgment, Rhudes Creek Solar challenged a procedural defect that was created by a discrepancy between a state statute and the local ordinance. By judgment entered on September 13, 2021, the Court agreed and found that the Hardin County

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ordinance failed to comply with KRS 100.203(6) because the ordinance failed to give the

applicant for a zone change and CUP the opportunity to elect to have the CUP heard by

the Board of Adjustments. Accordingly, the Court held that the prior proceedings before

the Planning Commission are not valid. Hardin County did not appeal that decision.

ibV Energy Partners is communicating and coordinating with the Hardin County

Attorney's Office and Planning Commission on the next steps in the process for potential

approval of the zone change and CUP. Prior to the Planning Commission's consideration

of the renewed application for a zone change, Hardin County sought to amend its zoning

ordinance in order to comply with KRS 100.203. On October 19, 2021, the Planning

Commission approved a recommendation for a text amendment to the zoning ordinance.

The Hardin County Fiscal Court held a first reading of that ordinance on October 26,

2021. It is anticipated that the Fiscal Court will vote to approve the text amendment after

a second reading of the ordinance at the November 9, 2021, meeting. Rhudes Creek Solar

anticipates that the Planning Commission will consider the zone-amendment application

at the regular meeting scheduled for December 7, 2021. If the Planning Commission

approves the zone amendment, Rhudes Creek Solar anticipates that the Board of

Adjustments will consider the application for CUP at its regular meeting on January 6,

2022.

Witness:

Legal; Robin Saiz

RESPONSES TO SITING BOARD'S FIRST REQUEST FOR INFORMATION

11. Detail the status of any litigation in state or federal court, or before an administrative agency other than the Siting Board involving this project.

Response: See response to Item 10 above.

Witness: Legal; Robin Saiz

RESPONSES TO SITING BOARD'S FIRST REQUEST FOR INFORMATION

12. Refer to the Application, Attachment K, in general. If not already addressed, explain any other assumptions that were made in order to perform this analysis.

Response: All assumptions that were made in order to perform the economic analysis are documented in the report.

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13. Refer to the Application, Attachment K, page 2. Detail the proportion of the 100

million investment that is projected to be spent on (1) land acquisition, (2) site preparation, (3)

solar panel and electrical equipment installation, and (4) landscaping and security fencing.

Response: See the attached chart showing an estimated breakdown of costs,

which is being filed with a Petition for Confidential Treatment.

Witness: Robin Saiz

Design	
System Design	
Civil	
Site Access Roads	
SWIPP	
Lay Down Area	
Grading & Clearing	
Site Fence	
Transformer/Inver Structure Support	
Mechanical	
Pile Install	
Tracker Install	
Module Install	
Electrical	
Electrical Materials	•
Electrical Install	
Transformers	
Inverter Install	
DAS Monitoring Equip.	
DAS Install	
Other	
O&M Building	
General Cond., Insur & Overhead	-
General Conditions	
Builder's Risk Insurance	
General Liability	
Fee & Profit for Contractor	
Other Civil	
Tracker	
Inverter	
Module DDP	
Buffer	
Total	

14. Refer to the Application, Attachment K, pages 2–4. Explain if the IMPLAN model was calibrated to Hardin County only. If so, explain why it would not be a reasonable assumption to expect that the construction phase labor would also be drawn from contiguous counties.

Response: Yes, the IMPLAN model was developed for Hardin County only. There will likely be very small impacts in surrounding counties. Dr. Coomes examined this issue for several other solar projects in Kentucky and reported the results to the Kentucky Siting Board. The difference in predicted economic impacts, whether using the one siting county versus all regional counties, is negligible. This is primarily due to the lack of solar farm suppliers anywhere in Kentucky. The solar panels and components must be imported. Local workers are hired for construction, and some local supplies and services are expected to be provided, such as dirt movement, concrete, fencing, and landscaping. These latter impacts are captured in the IMPLAN model of Hardin County.

Zooming out to other counties has little impact on the results. For example, even widening the scope to include the whole state of Kentucky only raises the employment multiplier from 1.30 to 1.56, amounting to a predicted difference of about 60 jobs.

Nevertheless, to check this again, Dr. Coomes constructed a new IMPLAN model containing the seven counties in the region: Hardin plus Bullitt, Grayson, Hart, Larue, Meade, and Nelson. The predicted employment multiplier for the seven-county region was 1.33, compared to 1.30 for Hardin only. This implies a difference of only 8 more jobs to the 312 total jobs originally estimated for the solar farm.

Finally, there is the question of drawing workers from surrounding counties, which

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is highly likely. However, in almost all economic statistics programs, employment is

counted on a place of work basis, not place of residence. All workers on the construction

of the solar farm are counted as working in Hardin County, as is the custom. Workers

commuting in from nearby counties will bring their paychecks home to their resident

county, but the just discussed seven-county model simulation suggests that the economic

impact on those counties is negligible (the induced effect in an IMPLAN model includes

the modest effect of new household spending on the region).

Witness:

Dr. Paul A. Coomes

RHUDES CREEK SOLAR, LLC

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15. Refer to the Application, Attachment K, page 3. Explain the economic impact of

the project during both the construction and operational phases if the model was calibrated to

the Commonwealth and not just Hardin County.

Response: As discussed in Item 14 above, the predicted total employment

impacts statewide are 60 jobs higher than those predicted for Hardin County alone. For

the operations phase the IMPLAN models for both Hardin and the state of Kentucky are

empty of data for the relevant sector #42, "Electric power generation – solar". This is

because there is no recorded history of solar farm operation in Kentucky. But, given the

likelihood of only three or four operations jobs after construction, this is not a significant

economic consideration.

Witness:

Dr. Paul A. Coomes

RESPONSES TO SITING BOARD'S FIRST REQUEST FOR INFORMATION

- 16. Refer to the Application, Attachment K, page 3.
- a. Set out what version of IMPLAN was used for this analysis.
- b. Provide information on how often IMPLAN datasets are updated.

Response: Dr. Coomes's estimates were all generated from custom IMPLAN models, version 3.1.1001.12, using 2019 economic data. IMPLAN updates these datasets each year, usually in November or December, and 2019 is the latest release.

17. Refer to the Application, Attachment K, page 4. Explain whether there are any direct, indirect, or induced economic effects for the rest of Kentucky outside Hardin County.

Response: See responses to Items 14 and 15 above.

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- 18. Refer to the Application, Attachment K, page 4.
- a. Explain what proportion of the 312 total new jobs are expected to be full time.
- b. Of the 312 total new jobs, explain if IMPLAN provides information asto the type of job expected to be created in Hardin County (e.g. retail, food service, government, etc.). If so, set these forth.
- c. Detail which of the 312 jobs created in Hardin County during the construction phase of the project, are expected to remain at the end of that phase.

Response:

- (a) IMPLAN results do not delineate between full-time and part-time jobs. However, the assumed average annual pay of \$50,000 suggests these are primarily full-time jobs.
- (b) Yes, IMPLAN predicted employment by sector from construction. See table below. As one can see, most of the spin-off impacts are related to household spending of the new payroll generated (induced effect), as opposed to the supply chain for construction materials (indirect effect).

Top Ten Sectors by Employment Impact, Hardin County Solar Farm Construction				
Sector	Description	Employment		
52	Construction of new power and communication structures	240.0		
405	Retail - Building material and garden equipment and supplies stores	6.5		
447	Other real estate	3.8		
509	Full-service restaurants	3.8		
510	Limited-service restaurants	3.6		
411	Retail - General merchandise stores	2.4		
417	Truck transportation	2.2		
472	Employment services	1.9		
493	Individual and family services	1.9		
483	Offices of physicians	1.7		
	other 320 sectors	44.2		
	Total employment imact			
Souce: IN	PLAN model of Harding County, using 2019 economic data.			

(c) None of the construction jobs are expected to remain after the solar facility is constructed.

19. Refer to the Application Attachment K, page 5. Explain whether there any income tax revenues that will be paid to the Commonwealth. If so, provide an estimate for both the construction and operational phases of the project.

Response: There will be Kentucky individual income taxes associated with the solar farm construction. I estimate that the effective state individual income tax rate is currently 4.87 percent, calculated as state income tax revenues as a percent of wages and salaries, averaged over the past five years. This implies about \$742,000 in tax payments from the estimated \$15.2 million in total payroll from construction. The same issue applies to Kentucky sales receipts, where the effective tax rate is 4.0 percent of payrolls. As for income tax revenue during the operation phase, Dr. Coomes has not estimated the revenue, which would be dependent on the salary of the 3 or 4 individuals anticipated to be employed during operations.

	2016	2017	2018	2019	2020	5-year average
Fiscal Year (millions)						
Individual Income Tax	\$4,282.1	\$4,393.9	\$4,603.6	\$4,544.7	\$4,765.20	
Sales and Use Tax	\$3,462.7	\$3,485.2	\$3,605.7	\$3,937.6	4,070.90	
Calendar Year (thousands)						
Wages and Salaries	\$87,705,340	\$90,433,299	\$93,234,914	\$96,606,011	\$96,172,951	
Effective Rates on W&S						
Individual Income Tax	4.88%	4.86%	4.94%	4.70%	4.95%	4.879
Sales and Use Tax	3.95%	3.85%	3.87%	4.08%	4.23%	4.009

Source: state government revenues from Office of State Budget Director; wages and salaries from US Bureau of Economic Analysis.

RHUDES CREEK SOLAR, LLC RESPONSES TO SITING BOARD'S FIRST REQUEST FOR INFORMATION

- 20. Provide a description of any construction method that will suppress the noise generated during the pile driving process that Rhudes Creek Solar plans to employ and the associated reduction in noise that each method produces.
- a. Provide Rhudes Creek Solar's planned level of construction using methods that suppress noise during the pile driving process.
- b. Provide the estimated additional cost the use of noise suppression methods Rhudes Creek Solar projects it will incur.
- c. Provide a description of any additional construction noise mitigation Rhudes

 Creek Solar considered implementing for the project, include the reason why it chose not to

 implement the additional noise mitigation measures.

Response:

We have multiple measures in place that we employee on our project sites to ensure noises levels are kept at a safe level for on site employees as well as to ensure minimal disruption for neighboring properties.

- (a) Internal controls focus on the time of day when pile driving is allowed on site as well as limiting the continuous duration of driving activities to reduce exposure for on-site personnel. Pile driving can only occur from 8am to 5pm on site and each driver can only run for 1 hour at a time followed by a 15-minute safety stand down. Installation of vegetation buffers and plantings of trees on site are strategically planned for early-stage construction to reduce and muffle the potential for construction noise to make it off site. Rhudes Creek Solar has not estimated the additional cost for noise suppression methods.
- (b) We anticipate that it will cost \$500,000 to \$750,000 for increased vegetative buffer as well as the cost multiplier for newer-age equipment that ibV requires our

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subcontractors to utilize as well as the decibel measuring devices that are deployed by the

safety and quality team to monitor on site levels. We also require our subcontractors to

reduce the frequency of multiple pile drivers working in the same area during

construction - this process reduces the production rate which causes ibV to incur

additional man hours and labor costs.

(c) Additional options ibV deploys on our project is to design our arrays in

such a way that keeps noise generating activities as far from neighboring homes as

feasible. Building of permanent and stationary sound barriers are an option that ibV has

opted not to deploy given the capital expense and noise levels not being significant enough

to require such measures.

Witness:

Alexander Gregory

RHUDES CREEK SOLAR, LLC

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21. Provide a table containing the distance and anticipated Sound Pressure Level

dBA at each project participant residence, within 300 feet of pile driving activities, during the

construction phase.

Response: The distance and anticipated noise levels at each project participant

residence will be further investigated and assessed in the noise study mentioned in Item 8

above.

Witness:

Jeffrey Chang

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RESPONSES TO SITING BOARD'S FIRST REQUEST FOR INFORMATION

22. Provide a table containing the distance and Sound Pressure Level dBA at each

project non-participant residences, when pile driving occurs within 500 feet of pile driving

activities, during the construction phase.

Response: The distance and anticipated noise levels at each project participant

residence will be further investigated and assessed in the noise study mentioned in Item 8

above.

Witness:

Jeffrey Chang

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