RHUDES CREEK SOLAR, LLC TRANSMISSION LINE APPLICATION



September 7, 2021

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1 APPLICANT INFORMATION

<u>REQUIREMENT</u>: per KRS 278.714(2)(a): The name, address, and telephone number of the person proposing construction of the nonregulated electric transmission line or the carbon dioxide transmission pipeline

<u>COMPLIANCE</u>: Please see below for the requested information.

• Name: ibV Energy Partners LLC (Timothy Kim, CEO)

Address: 777 Brickell Avenue, Suite 500, Miami, FL 33131

• Phone: 786-575-8005

2 ROUTE DESCRIPTION

<u>REQUIREMENT</u>: per KRS 278.714(2)(b): A full description of the proposed route of the electric carbon dioxide transmission pipeline from residential transmission line or the carbon dioxide transmission pipeline and its appurtenances. The description shall include a map or maps showing:

- 1. The location of the proposed line or pipeline and all proposed structures that will support it;
- 2. The proposed right-of-way limits;
- 3. Existing property lines and the names of persons who own the property over which the line or pipeline will cross; and
- 4. a. The distance of the proposed electric transmission line from residential neighborhoods, schools, and public and private parks within one (1) mile of the proposed facilities; or
 - b. The distance of the proposed carbon dioxide transmission pipeline from residential neighborhoods, schools, and parks, either private or public, within one thousand (1,000) feet of the proposed facilities.

COMPLIANCE:

Rhudes Creek Solar will interconnect to the Louisville Gas & Electric/Kentucky Utilities transmission network. The nonregulated electric transmission line will be located within Hardin County and will span approximately 1.5 miles along a 100-foot wide transmission easement on three properties. The transmission right-of-way has been secured through lease option agreements with three individual landowners. The site has been fully surveyed; wetlands have been delineated; and geotechnical conditions have been studied. There are no residential neighborhoods, schools, and public and private parks within 1 mile of the proposed gen-tie line. A 1-mile vicinity map of the transmission line is attached as Attachment N for reference.

The gen-tie line has been engineered using equipment drawings and specifications that are representative of anticipated final equipment. The structure foundations are designed utilizing the best available geotechnical data for the site. There are a total of 14 H-frame structures with galvanized steel poles designed for the gen-tie. The structures will carry a 138 kV overhead transmission line specified with a steel reinforced 795 Drake aluminum conductor.

The gen-tie structural drawings and transmission plan and profile drawings are attached as Attachments O and P for reference.

3 DESCRIPTION OF THE PROPOSED LINE

<u>REQUIREMENT</u>: KRS 278.714(2)C: With respect to electric transmission lines, a full description of the proposed line and appurtenances, including the following:

- 1. Initial and design voltages and capacities;
- 2. Length of line;
- 3. Terminal points; and
- 4. Substation connections.

COMPLIANCE:

A 138 kV single circuit generator tie line is planned for the proposed solar project. The specified wire, a 795 Drake ACSR Aluminum Conductor Steel Reinforced, has a rated ampacity of 907 amps. The gen-tie will connect a 138/34.5/13.8 kV project substation located at the project site to the point of interconnection that is located approximately 1.5 miles north of the project site. The point of interconnection will be a new switchyard located on the existing Black Branch to Hardinsburg transmission line. There are a total of 14 structures with a conductor that spans a total length of 8,024 linear feet.

In December 2020, a Provisional Facilities Study was completed by TranServ International the interconnection facilities and network upgrades required to provide interconnection service to the proposed Rhudes Creek Solar generator for 100 MW of injected power. The network upgrade is the aforementioned 138 kV switchyard with a 3 breaker ring bus arrangement. The interconnection facilities will include a disconnect switch, 3 surge arresters, and metering. Appendix A of the Provisional Facilities Study Report provides a conceptual layout of the new switchyard, and this document is attached to the Application as Attachment J.

The generator interconnection facilities included the previously described gen-tie line as well as a project substation. The project substation collects the medium voltage 34.5 kV circuits from the photovoltaic arrays and inverter/transformer stations to step up the voltage to 138 kV. The main GSU features a 3-winding transformer. The project substation site plan, single-line diagrams, and general arrangement drawings have been provided for reference.

4 COMPLIANCE WITH NATIONAL ELECTRIC SAFETY CODE

<u>REQUIREMENT</u>: KRS 278.714(2)(d): A statement that the proposed electric transmission line and appurtenances will be constructed and maintained in accordance with accepted engineering practices and the National Electric Safety Code.

<u>COMPLIANCE</u>: The proposed electric transmission line and appurtenances will be constructed and maintained in accordance with accepted engineering practices and the National Electrical Safety Code.

5 PUBLIC NOTICE EVIDENCE

REQUIREMENT: KRS 278.714(2)(e): With respect to both electric transmission lines and carbon dioxide transmission pipelines, evidence that public notice has been given by publication in a newspaper of general circulation in the general area concerned. Public notice shall include the location of the proposed electric transmission line or carbon dioxide pipeline, shall state that the proposed line or pipeline is subject to approval by the board, and shall provide the telephone number and address of the Public Service Commission.

<u>COMPLIANCE</u>: A sample letter mailed on Tuesday, March 16, 2021, to landowners whose property borders the proposed site is contained in Attachment C. A copy of this notice and cover letter was mailed to each landowner, via Certified mail. Also contained in Attachment C is the tearsheet of the notice published in the *News Enterprise* on March 17, 2021, which is the newspaper of general circulation in Hardin County.

The public notice of application that was sent out to landowners whose property borders the proposed site on Thursday, September 2, 2021, is contained in Attachment D. A copy of this notice and cover letter was mailed to each landowner, via Certified mail and return receipt. Also contained in Attachment D is the affidavit of publication of the notice published in the *News Enterprise* on September 1, 2021, which is the newspaper of general circulation in Hardin County, as well as a scanned copy of that notice.

6 PROOF OF SERVICE ON PUBLIC OFFICIALS

<u>REQUIREMENT</u>: KRS 278.714(2)(f): Proof of service of a copy of the application upon the chief executive officer of each county and municipal corporation in which the proposed electric transmission line or carbon dioxide transmission pipeline is to be located, and upon the chief officer of each public agency charge with the duty of planning land use in the general area in which the line or pipeline is proposed to be located.

<u>COMPLIANCE</u>: As indicated in the Certificate of Service, a copy of the Siting Board Application for Rhudes Creek Solar was electronically transmitted to the Judge/Executive of Hardin County, Harry L. Berry and Hardin County Planning and Development Commission Chairman Mark Hinton (via Planning Director Adam King), on the date of the electronic filing of this application. Additionally, a paper copy will be sent upon request from these officials.