



**COMMONWEALTH OF KENTUCKY
ALISON LUNDERGAN GRIMES, SECRETARY OF STATE**

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ADD
Alison Lundergan Grimes
Kentucky Secretary of State
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Division of Business Filings Business Filings PO Box 718, Frankfort, KY 40602 (502) 564-3490 www.sos.ky.gov	Certificate of Authority (Foreign Business Entity)	FBE
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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 :

<input type="checkbox"/>	profit corporation (KRS 271B)
<input type="checkbox"/>	business trust (KRS 386)
<input type="checkbox"/>	limited partnership (KRS 362)
<input type="checkbox"/>	non-profit llc (KRS 275)

<input type="checkbox"/>	nonprofit corporation (KRS 273)
<input checked="" type="checkbox"/>	limited liability company (KRS 275)
<input type="checkbox"/>	ltd cooperative assn. (KRS)
<input type="checkbox"/>	cooperative assn. (KRS)

<input type="checkbox"/>	professional service corporation (KRS 274)
<input type="checkbox"/>	professional limited liability company (KRS 275)
<input type="checkbox"/>	statutory trust
2. The name of the entity is Caldwell 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): _____
(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 Delaware
5. The date of organization is 09/04/2019 and the period of duration is _____
(If left blank, the period of duration is considered perpetual.)

6. The mailing address of the entity's principal office is
 7650 Edinborough Way, Suite 725

<u>Edina</u>	<u>MN</u>	<u>55435</u>
<small>Street Address</small>	<small>City</small>	<small>State</small>
<small>City</small>	<small>State</small>	<small>Zip Code</small>

7. The street address of the entity's registered office in Kentucky is
 306 W. Main Street, Suite 512

<u>Frankfort</u>	<u>KY</u>	<u>40601</u>
<small>Street Address (No P.O. Box Numbers)</small>	<small>City</small>	<small>State</small>
<small>City</small>	<small>State</small>	<small>Zip Code</small>

and the name of the registered agent at that office is National Registered Agents, Inc.

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

<u>David Reamer</u>	<u>7650 Edinborough Way, Suite 725</u>	<u>Edina</u>	<u>MN</u>	<u>55435</u>
<small>Name</small>	<small>Street or P.O. Box</small>	<small>City</small>	<small>State</small>	<small>Zip Code</small>
<u>Blake E. Nixon</u>	<u>7650 Edinborough Way, Suite 725</u>	<u>Edina</u>	<u>MN</u>	<u>55435</u>
<small>Name</small>	<small>Street or P.O. Box</small>	<small>City</small>	<small>State</small>	<small>Zip Code</small>
<small>Name</small>	<small>Street or P.O. Box</small>	<small>City</small>	<small>State</small>	<small>Zip Code</small>

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: <u>Caldwell County, Kentucky</u>	
To complete the following, please shade the box completely.	
Please indicate the size of your business: <input checked="" type="checkbox"/> Small (Fewer than 50 employees) <input type="checkbox"/> Large (50 or more employees)	Please indicate whether any of the following make up more than fifty percent (50%) of your business ownership: <input type="checkbox"/> Women-Owned <input type="checkbox"/> Veteran Owned <input type="checkbox"/> Minority Owned
Please indicate which of the following best describes your business:	
<input type="checkbox"/> Agriculture <input type="checkbox"/> Mining <input type="checkbox"/> Services <input type="checkbox"/> Construction <input type="checkbox"/> Wholesale Trade <input type="checkbox"/> Retail Trade <input type="checkbox"/> Manufacturing <input type="checkbox"/> Finance, Insurance, Real Estate <input type="checkbox"/> Public Administration <input type="checkbox"/> Transportation, Communications, Electric, Gas, Sanitary Services <input checked="" type="checkbox"/> Other	

Signature of Authorized Representative 	David Reamer, President	9/12/2019
I, <u>National Registered Agents, Inc.</u> , consent to serve as the registered agent on behalf of the business entity.		
Type/Print Name of Registered Agent By: <u>National Registered Agents, Inc</u>	Assistant Secretary	09/11/2019
Signature of Registered Agent	Printed Name Stephanie Hovay	Title Assistant Secretary
Date (05/17)	Title Assistant Secretary	Date 09/11/2019

EXHIBIT B

DESCRIPTION OF PROPOSED SOLAR GENERATION FACILITY SITE

Requirements

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

Caldwell Solar, LLC (Caldwell), a wholly owned subsidiary of National Grid Renewables Development, LLC, is proposing the Caldwell Solar Facility (Project), which will be an up to 200-megawatt alternating current photovoltaic (PV) electricity generation facility. Project facilities will include solar panels, inverters, tracking racking, fencing, access roads, a substation, a switchyard, an operations and maintenance (O&M) building, a parking lot, below- and above-ground electrical collection lines, up to eight weather stations (up to 20 feet tall), and temporary construction laydown yards. The Project will be located on approximately 3,000 acres in Caldwell County between the towns of Fredonia and Princeton. No street address has been established at this time for the Project; the coordinates for the location are 37.085563°N and 87.592701°W. For interconnection, Caldwell will construct a substation within the project boundary to connect to the Caldwell County to Barkley 161-kV transmission line owned by Big Rivers Electric Corporation. A map showing the location of residential structures, schools, and public and private parks in relation to the proposed Project is presented in Exhibit I, Figure 1. A preliminary site plan and maps showing the Project structures, associated facilities, and boundaries are included in Exhibit J and Exhibit I.

Design

The Project will use solar panels with tempered glass varying in size from approximately 4 to 7 feet long by 2 to 4 feet wide and 1 to 2 inches thick. The solar panels will be installed on a tracking rack system that uses galvanized steel and aluminum for the foundations and frame and has a motor that allows the racking to rotate from east to west throughout the day. Each tracking rack will contain multiple solar panels. On the tracking rack system, the solar panels will be approximately 15 to 20 feet in height from the ground to the top of the solar panels when at a 45-degree angle (Figure 1). The height may vary by manufacturer and due to topography and vegetation constraints and could reach approximately 20 feet from the ground. The solar panels include heat-strengthened front glass, a rear back cover made of either heat-strengthened glass or polymer film, an aluminum exterior and rear frame, laminate encapsulation for weather protection, a semiconductor layer or silicon cells wired in series, a junction box on the rear side, and electrical lead wires to connect the module to adjacent units.

To limit light reflection, solar panels are constructed of dark, light-absorbing materials with anti-reflective coatings. The solar panels can reflect as little as two percent of the incoming sunlight depending on the angle of the sun. The solar panels will occupy most of the area inside the Project.

Linear Axis Tracking System

A linear axis tracking rack system allows the solar panels to track the position of the sun throughout the day. The solar panels and tracking rack system are generally aligned in rows running north and south with the solar panels facing east toward the rising sun in the morning, parallel to the ground during mid-day, and then west toward the setting sun in the afternoon. The solar panels are rotated by a small motor connected to the tracking rack system to slowly track with the position of the sun throughout the day. The tracking rack system optimizes the angle of the solar panels in relation to the sun throughout the day, thereby maximizing the production of electricity and the capacity value of the Project.

The tracking rack system is mounted on top of steel piers that are typically driven into the ground, without the need for excavation or concrete for the installation of the piers. Piers are typically installed at 8 to 15 feet below the ground surface, pending site-specific conditions that will be determined through geotechnical borings prior to construction. Figure 1 through Figure 3 shows the general racking equipment and dimensions of a linear axis tracking rack system.

Figure 1 Tracking Rack System



Figure 2 Approximate Tracking Rack System Dimensions

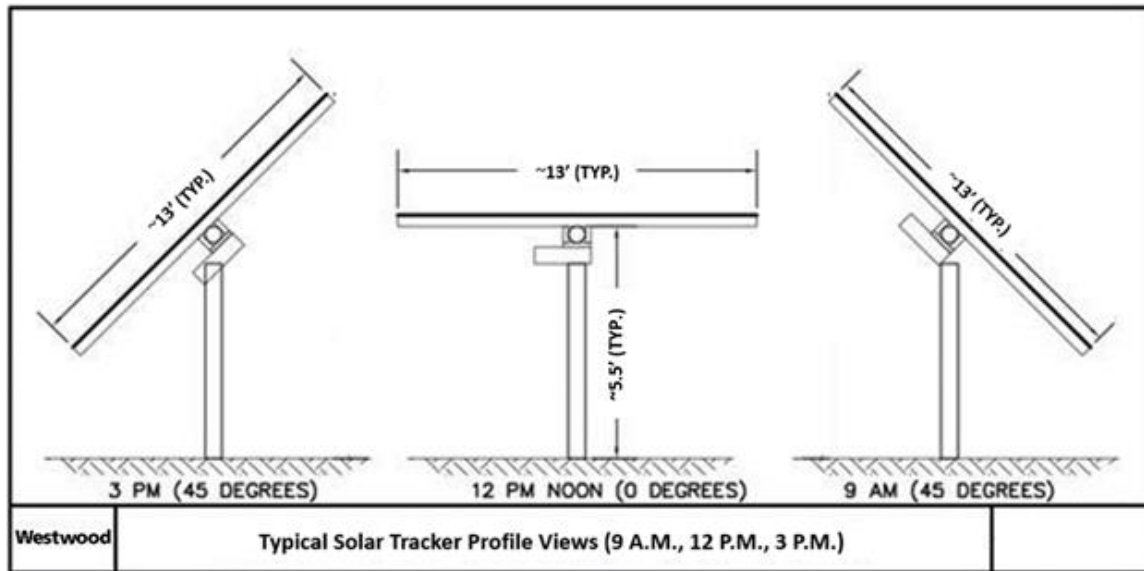


Figure 3 Standard Steel Pier Foundations



Inverters, Transformers, and Electrical Collection System

Inverter skids will be utilized at locations throughout the Project area and will include a transformer to which the inverters will feed electricity (Figure 4). The final number of inverters for the Project will depend on the inverter size, as well as inverter and panel availability. The Project's preliminary design proposes 65 central inverter skids. These skids provide the foundation for the inverter, transformer, and Supervisory Control and Data Acquisition (SCADA) system. The skids will be placed atop a concrete slab or pier foundations and typically measure 10 feet wide by 25 feet long, with a structure height of approximately 12 feet above grade (Figure 4). Concrete foundations will be poured onsite or precast and assembled off-site.

The inverters are within the interior of the Project along access roads. Figure 4 below shows a central inverter and step-up transformer station.

Electrical wiring will connect the panels to inverters, which will convert the power from DC to AC. The AC will be stepped up through a transformer from the inverter output voltage to 34.5 kV and brought via the collection cables to the Project substation. The electrical collection system will be installed below or above ground, or a combination of both. The type of electrical system will be determined prior to construction based on technology, availability of materials, and costs. Both below-ground and above-ground collection systems are currently used at utility-scale solar projects. The electrical cables that would be used for each type of electrical collection system are described below.

Below-ground Electrical Collection System

The panels deliver DC power to the inverters through cabling that will be located in a below-ground trench (approximately 4 feet deep and 1 to 2 feet wide). Inverters convert approximately 1,500 volts of DC output of the PV panels to between 650 and 950 volts of AC. Then, a step-up transformer converts the inverter AC voltage to an intermediate voltage of 34.5kV. Below-ground AC collection systems from the inverter skids to the substation will be installed in trenches or ploughed into place at a depth of at least 3 feet below grade. During all trench excavations, the topsoil and subsoil will be removed and stockpiled separately in accordance with the Agricultural Impact Mitigation Plan (AIMP). Once the cables are laid in the trench, the area will be backfilled with subsoil followed by topsoil. Electrical collection technology is rapidly evolving and will be site-specific depending on geotechnical analysis, constructability, and availability of materials. Final engineering and procurement will help determine the construction method for the electrical collection system.

Figure 4 Typical Inverter and Transformer Station



Above-ground Electrical Collection System

An above-ground electrical system is being considered for the Project for several reasons, including ease of access for operations and maintenance, reduced ground disturbance, and cost considerations. If above-ground cabling is utilized, the DC collection cables will be strung under each row of panels on steel arms, and a steel cable will be attached to the piles. At the end of each row, hanging brackets will connect several racks/rows of cables to a common collection point near their assigned inverter/transformer skid. At the collection point, the cables will be routed below ground at a minimum depth of at least 30 inches below grade to the inverter/transformer skid, where the current is converted to AC and the voltage is stepped up to 34.5 kV. A drawing of the typical structure of the hanging brackets at the end of each row is provided below in Figure 5. The electrical cables will then be routed below ground at a minimum depth of at least 3 feet below grade to a distribution-type pole. These poles will be made of wood or steel, approximately 12-18 inches in diameter, up to 70 feet in height, and spaced approximately 200-300 feet apart. Caldwell will utilize either one overhead collection line or two overhead collection lines running in parallel, spaced approximately 60 feet apart. Final engineering will determine the need for one or two collection lines. Figure 6 provides a schematic of the above-ground collection system components and configuration. The electrical cables will then be strung on poles to the Project substation. Above-ground medium voltage collection technology is rapidly evolving and, if utilized, the number of poles will be determined based on final engineering. Cables connecting each unit of solar arrays will be directionally bored under or spanned over public roads.

Figure 5 Typical Above-Ground Collection Hanging Bracket

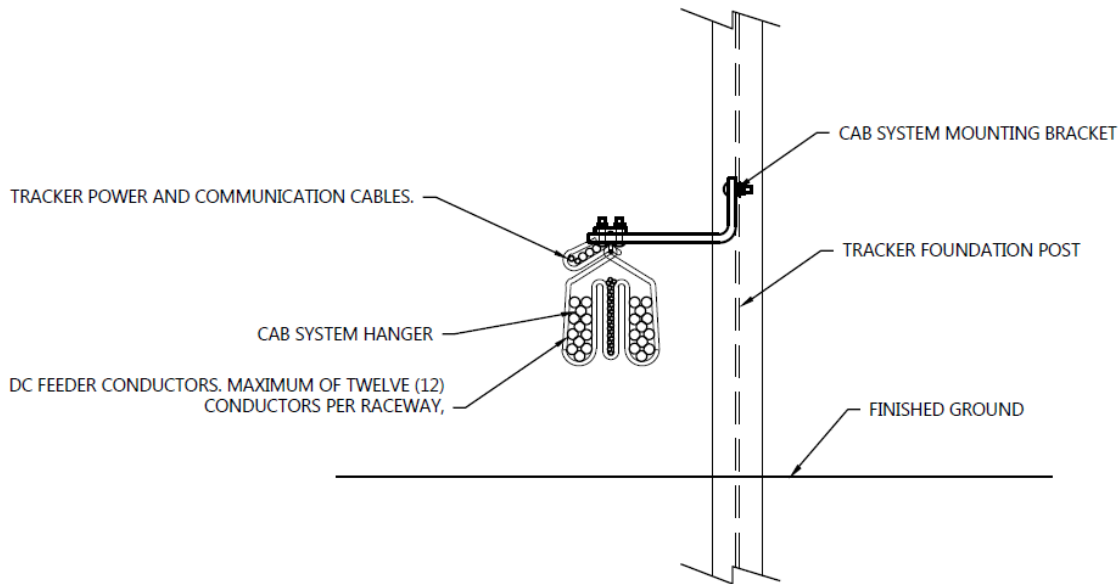
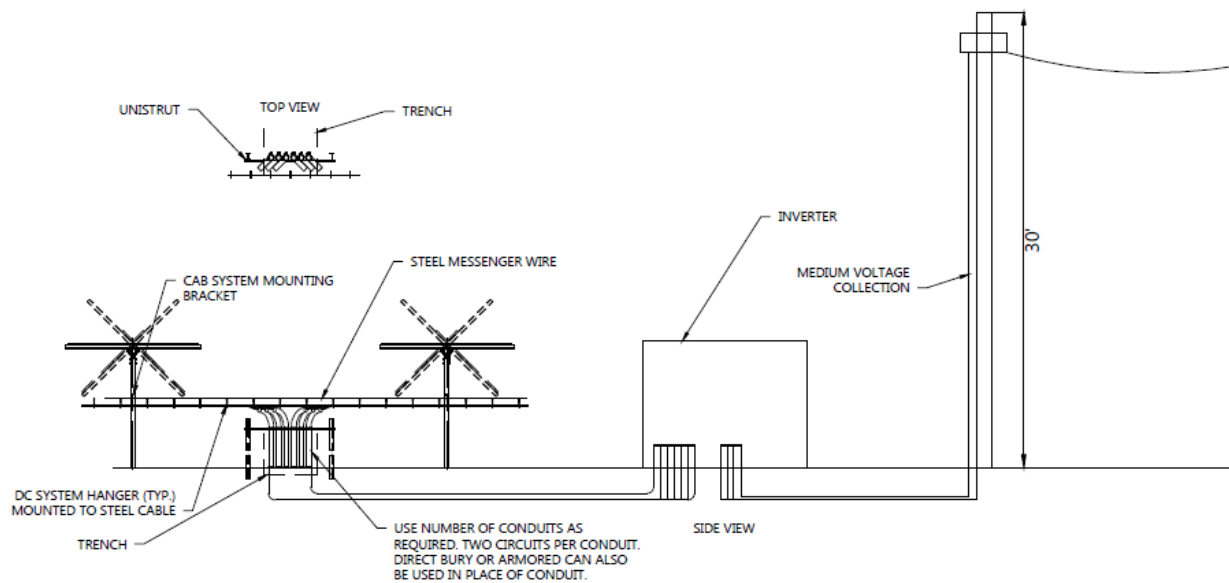


Figure 6 Typical Above-Ground Collection System Components and Configuration



Hybrid Below-ground and Above-ground Electrical Collection System

A hybrid below-ground and above-ground electrical system is also being considered for the Project for several reasons that are advantageous to the above-ground electrical system, including ease of access for operations and maintenance, reduced ground disturbance, and cost considerations. Similar to those in the above-ground system, the DC collection cables will be

strung under each row of panels on steel arms and a steel cable attached to the piles. At the end of each row, hanging brackets will connect several racks/rows of cables to a common collection point near their assigned inverter/transformer skid. At the collection point, the cables will be routed below-ground at a minimum depth of at least 30 inches below grade to the inverter/transformer skid, where the current is converted to AC and voltage is stepped up to 34.5 kV. A drawing of the typical structure of the hanging brackets at the end of each row is provided above in Figure 5. The electrical cables will then be routed below-ground at a minimum depth of at least 38 inches below grade to the Project substation. Cables connecting each unit of solar arrays will be directionally bored under public roads.

Access Roads

The Project will include approximately 10 miles of graveled access roads that connect the Project facilities to public roads. The final length of the access roads will depend on the equipment selected and final engineering. These roads will be approximately 16-20 feet wide along straight portions of the roads and wider along curves and at internal road intersections (approximately 40 feet). The access points to the Project from public roads will have gates.

Caldwell has designed access roads for effective and efficient access for O&M and for safe ingress and egress of employees, visitors, and emergency responders. Caldwell has minimized the amount of access roads for the Project. For example, access roads provide access to all portions of the site and every central inverter, but not every block of solar panels has an access road along its entire perimeter. This design minimizes the amount of ground disturbance and new impervious surfaces while still providing effective and efficient site access.

Safety Features

The Project will be surrounded by a 6-foot-tall fence consisting of chain link, woven wire, or welded wire and topped by barbed and/or smooth wire for security, per National Electrical Code Article 110. Outside the fence, vegetative buffers will be planted as screens where the solar panels and other electrical equipment are adjacent to residences. Vegetative buffers will consist of evergreen and/or deciduous trees and shrubs.

The Project will have security cameras and down-lit security lighting at strategic locations throughout the facility. The typical lighting pole height will be 10 feet, and lights will be operated manually by switch and motion activation. The lights at each inverter will be down lit and switch-controlled for repair purposes.

Associated Facilities

Project Substation and Switchyard

The Project substation will be a 34.5/161-kV step-up substation with metering and switching gear required to connect to the transmission grid. It will be designed according to regional utility practices and the National Electrical Safety Code. The area within the substation will be graveled to minimize vegetation growth in the area and reduce fire risk. The substation will be fenced with a 7-foot-tall chain-link fence topped with 1 foot of barbed wire for security and safety purposes. At the completion of construction, the substation and switchyard area will be approximately 3 acres.

Operations and Maintenance Building, and Parking

An O&M building will provide access and storage for Project O&M equipment. Caldwell will obtain any required building permits for the O&M building from Caldwell County prior to construction. The O&M building is anticipated to be approximately 3,200 square feet and will contain an office

for the onsite Plant Manager, a technician room, restroom, break room, locker room and shop area that will allow for the storage of equipment and tools necessary to operate and maintain the Project. This equipment will include a SCADA cabinet, spare solar panels, spare parts for the substation and equipment to operate the substation, as well as safety equipment for working with live electricity. A gravel or paved parking lot will be located adjacent to the O&M building and will have at least one parking spot per employee and additional room for deliveries. Caldwell has not finalized a location for the O&M building at this time.

Weather Stations

The Project will include up to 8 weather stations of up to 20 feet in height (see Figure 7 below). The weather stations will be located within the Project boundary, and their final locations will be determined following final engineering. The weather stations measure meteorological variables that have an impact on the facility's performance and efficiency.

Figure 7 Weather Station



Temporary Facilities

Caldwell will use temporary laydown yards within the Project boundary. These yards will serve as both parking areas for construction personnel and staging areas for Project components during construction. The temporary laydown yards will total approximately 15 acres across the site. Caldwell has not finalized locations for the temporary laydown yards at this time. The temporary laydown yards may be located in permanently unbuilt areas within the Project boundary or in areas that will eventually be filled with panels or other generation equipment.

EXHIBIT C PUBLIC NOTICE EVIDENCE AND REPORT

Requirements

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:

- Landowners whose property borders the proposed site; and
- The general public in a newspaper of general circulation in the county or municipality in which the facility is proposed to be located.

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:

- 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;
- 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
- 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

Notice of Application

Notice of application was published in *The Times Leader* (the Caldwell County newspaper) on September 22, 2021. An affidavit of publication and the notice language is attached. Adjacent landowners of the Project were sent notice of application letters on September 24, 2021 via registered mail. A template letter and list of adjacent landowners is attached to this exhibit; however, personal information has been redacted pursuant to 807 KAR 5:001 Section 4(10). Two properties, both small cemeteries, did not have mailing addresses for the owners or caretakers, nor was the County able to provide such. Caldwell did attempt to give effective notice via mailings to the surrounding parcel addresses.

Public Information Meeting

The public was provided multiple opportunities and avenues to engage with Caldwell Solar, LLC (Caldwell, or the Applicant) and receive information about the proposed solar facility. The Project website (available at <https://nationalgridrenewables.com/caldwell/>) provided the public with details on how to attend the public information meeting, a map showing the Project Area, aerial imagery, parcel information for all participating properties in Caldwell County, opportunity to

submit questions and comments regarding the project, a summary of frequently asked questions and responses, and instructions on how to request more information.

Notice of the public information meeting was published in *The Times Leader* (the Caldwell County newspaper) on May 29, 2021. An affidavit of publication and the notice language is attached. Adjacent landowners of the Project were directly notified and invited via registered mail on June 1, 2021 to participate in the public information meeting. A template letter and list of adjacent landowners are attached to this exhibit; however, personal information has been redacted pursuant to 807 KAR 5:001 Section 4(10). Two properties, both small cemeteries, did not have mailing addresses for the owners or caretakers, nor was the County able to provide such. Caldwell did attempt to give effective notice via mailings to the surrounding parcel addresses.

On the evening of June 17, 2021, the Applicant conducted a public information meeting in the form of an open house. Project representatives provided information on the development, permitting, construction, and operation of the proposed Caldwell Solar Project. Attendees were able to view Project maps, ask questions, and take-home Project materials. Copies of the materials provided at the public information meeting are attached to this exhibit. The public information meeting was attended by 27 participants, including participating landowners, neighbors, and public officials.

The following is a brief description of other public involvement activities the Applicant has conducted prior to submission of this Application:

- On February 24, 2020, Caldwell representatives met in person with Caldwell County Judge Executive Larry Curling and District Magistrates to introduce the Project and answer initial questions;
- On July 10, 2020, a Caldwell representative had a one-on-one phone call with the current Caldwell County Schools Superintendent, Nate Huggins to introduce the Caldwell Solar project and answer initial questions;
- In early August 2020, a Caldwell representative had a one-on-one phone call with Caldwell County Judge Executive Larry Curling to provide updates on the status of the Project and answer questions;
- On August 12, 2020, Caldwell representatives gave a virtual introductory Project presentation to Caldwell County Judge Executive Larry Curling;
- On August 17, 2020, Caldwell representatives gave an introductory Project presentation to the Caldwell County Schools Board of Education at a regularly scheduled Caldwell County Schools Board of Education meeting;
- On August 25, 2020, Caldwell representatives gave an introductory Project presentation to the Caldwell County Fiscal Court at a regularly scheduled Caldwell County Fiscal Court meeting;
- In August 2020, the Project made a financial donation to the Caldwell County Board of Education to support the purchase of COVID-19 related supplies for the upcoming school year;
- On August 25, 2020, Caldwell representatives hosted in-person open office hours in the community to allow members of the public to attend and learn about the Project; and
- On August 25, 2020, Caldwell representatives hosted a virtual online presentation to share information about the Project with the public. A copy of the presentation slide deck was posted on the Project's website following the meeting.

Gospel experience is good for young and old people

One of the challenges in enlisting people to Every Home Visits is the reluctance to be put on the spot to enter into conversations — gospel conversations — with strangers. You aren't sure if you will have a door slammed in your face or be greeted by a smiling face who thanks you for your interest in their eternal destiny.

Then there are times when you experience unexpected blessings. That happened to the last weekend.

Our two youngest grandsons were visiting with us for a couple of days, so Saturday afternoon I told them to get in the car so we could hand out some packets. They were not thrilled.

After a busy morning of swim practice and a soccer game, they were quite content to spend the afternoon watching television. But they had no choice in the matter — off we went to our designated neighborhood.



CHIP HUTCHESON

We encountered James, a 73-year-old man suffering from COPD, aided in his breathing by an oxygen tank. I asked him about his relationship with the Lord, and he smiled as he talked about trusting the Lord as a sophomore in high school and then being baptized. He was interested in knowing more about our church, especially if he could view the services online since his health kept him home most of the time. We prayed with him, then

I was surprised when 9-year-old Kaleb and 10-year-old Isaac began interacting with him — asking him questions, showing their interest in his situation in life.

For the most part, I stood back and watched them look him straight in the face, speak distinctly and express their concern for him and his health. As we walked to the next house, I heard Kaleb say, "I sure do like Mr. James."

At our next house, a woman assured us that she was saved, and then mentioned that her grandmother was going on a trip to Egypt soon. Kaleb asked if she was going to Cairo, which led him into a discussion about museum options there that the grandmother might want to visit. The woman smiled and thanked him for his travel tip.

At our last house, we were steps from the front door when a car in the street stopped and asked if we were looking for them. My reply, "Yes, if you live here."

They remained in their car, but were extremely interested in what we were doing.

As I explained the Kentucky Baptist Convention initiative to take the gospel to 1.7 million homes in the state, the wife's face lit up. The couple assured us that they had trusted Jesus and were church members — but like James — they were interested in knowing more about West Broadway Baptist. They voiced their joy over the effort to go door-to-door to reach the lost with the gospel. The wife told Isaac and Kaleb she was blessed to see young boys doing the Lord's work,

opening the door for another heartwarming conversation. The boys told of the family's year (2014) spent on the mission field in Uganda and that they had watched this couple and the boys talk as though they had known each other a long time. Walking back to our car, I heard the boys say to each other, "That was fun."

Fun! I would say rewarding — seeing two young boys show genuine interest in people they had never met before, finding joy in ministering to people rather than watch TV or play a game on my phone. Of all the great family memories I have, this is certainly one of the best. Sharing the gospel is first and foremost, with grandsons by my side, and seeing them embrace that effort and join me in conversations — that will

never be forgotten.

It also brought home a reality. Perhaps the major challenge to getting people out of church pews and into the mission field that surrounds them is making that first visit. In most cases, once Christians make that initial effort to visit homes to share the gospel, they are more likely to continue visiting. They see the great losses that exist, but they also encounter fellow Christians who are a blessing to them and encourage them in their service.

Saturday's visits are evidence that taking the gospel to every home is not burdensome, but fun if you're a younger and rewarding if you're a senior citizen.

Chip Hutcheson is interim communications director for the Kentucky Baptist Convention.

THE CLASSIFIED SECTION

CALL 270-601-4115 TO PLACE AN AD!

323-D S. Jefferson St. • Princeton, KY 42445

Classified Deadline - Monday's and Thursday's at 10 a.m.

ALL YARD SALES MUST BE PREPAID.



PUBLIC NOTICE
Second reading of a proposed ordinance amending the Caldwell County Budget for the Fiscal Year 2021-2022, to include unanticipated receipts from Prior Year Carryover for General Fund in the amount of \$2,000,000.00 and increasing expenditures in the area of utilities and will be held on September 28th, 2021 at 9:00 a.m. at the Caldwell County Court-house. A copy of the proposed ordinance with full text is available for public inspection at the Office of the County Judge/Executive during normal business hours.

The Paducah Sun
is currently accepting applications for
PRESS OPERATOR FULL-TIME \$11/HR
The Paducah Sun has an immediate opening for a full-time press operator. The ideal candidate will be responsible for the performance and printing of all newspaper products. This position is full-time and must be located in the Paducah, KY area. The position is full-time and must be located in the Paducah, KY area. The position is full-time and must be located in the Paducah, KY area.

Let Us Sell Your Home FAST
NOTICE OF APPLICATION
Caldwell Solar, LLC, a subsidiary of National Grid Renewables, LLC (f.k.a. Geronimo Energy, LLC) is proposing to construct and operate an up to 200-megawatt solar merchant generation facility. The proposed Caldwell Solar Project will be located on approximately 3100 acres in Caldwell County, southeast of Friedonia, near Croder. The proposed Caldwell Solar Project will connect to the Caldwell County to Bull Run 151 KV transmission line owned by Big River Electric Corporation.

ORDINANCE OF THE CITY OF PRINCETON, KENTUCKY, REPEALING ORDINANCE 03-18-2020-3 AND ELIMINATING DESIGNATED CURBSIDE PICK-UP PARKING SPACES ADJACENT TO BLACK PATCH GRILLE (101 WEST MAIN STREET) AND GATHER ON MAIN (108 EAST MAIN STREET) RESTAURANTS. WHEREAS, public access to restaurants within the Commonwealth of Kentucky had been restricted as a result of the COVID-19 pandemic and WHEREAS, the above-mentioned restrictions prohibited drive-in cases by restaurants and only allowed for restaurant sales to be conducted on a pick-up or delivery basis; and WHEREAS, in response to these restrictions, the City Council of the City of Princeton, Kentucky, passed emergency ordinance 03-18-2020-3, designating one parking space in front of Black Patch Grille (101 West Main Street) and one parking space in front of Gather on Main (108 East Main Street) to be utilized for curbside pick-up parking only; and WHEREAS, the restrictions on restaurants have since been lifted; NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Princeton, Kentucky as follows: Ordinance 03-18-2020-3 is hereby repealed in its entirety. SO PASSED on first reading this 30th day of August, 2021. SO PASSED on second reading this 7th day of September, 2021.


Requirements:
Must be able to read and interpret documents such as schedules, operating and maintenance manuals and general instructions.
Must be able to perform regular work on a job.
Must be able to work outdoors in all weather conditions.
Must be able to lift and move objects weighing up to 25 pounds.
Must be able to work on a job site.
Must be able to work on a job site.
Must be able to work on a job site.

NOTICE OF COMMISSIONER'S SALE
Farmers Bank & Trust Company, Princeton, Kentucky 42445, Plaintiff vs. Unknown Heirs and/or Dev sees of Phyllis J. Hoffman, deceased, and Unknown Spouses of Phyllis J. Hoffman, deceased, Kentucky, Respondents.
CVIL ACTION NO.: 21-CI-00074
By virtue of a judgment and Order of Sale entered in the Caldwell Circuit Court on Aug. 3, 2021 in the above action, I shall proceed to offer for sale at the courthouse door, in the City of Princeton, Caldwell County, Kentucky, to the highest bidder at PUBLIC AUCTION on Friday, September 24, 2021 at 10:00 a.m., cash or upon a credit for 30 days, a tract of real estate located at 233 Jo Jones Road, Princeton, Kentucky 42445, Map Number 39-23C, described more particularly in Deed Book 289, Page 436, Caldwell County Clerk's Office.

See it... Hear it... Say it... Buy it... Rent it... Sell it... Learn it... List it... Tell it... Fetch it... Smell it... Trade it... Hire it... Get it!... in the CLASSIFIEDS!

I, Shelia Brennan, office manager of The Times Leader, a newspaper of general circulation, published in the City of Princeton, County of Caldwell, State of Kentucky, do hereby affirm the legal advertisement emailed electronically to your company was published in the Sept. 22, 2021 edition of The Times Leader.

Shelia Brennan



09/24/21

NOTICE OF APPLICATION

Caldwell Solar, LLC, a subsidiary of National Grid Renewables, LLC (f.k.a Geronimo Energy, LLC) is proposing to construct and operate an up to 200-megawatt solar merchant generation facility. The proposed Caldwell Solar Project will be located on approximately 3100 acres in Caldwell County, southeast of Fredonia, near Crider. The proposed Caldwell Solar Project will connect to the Caldwell County to Barkley 161 kV transmission line owned by Big River Electric Corporation.

Caldwell 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

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 solar generation facility 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.

If you have questions, please contact Caldwell Solar, LLC at CaldwellSolar@nationalgridrenewables.com or 364-201-2587.



September 23, 2021

Name
Address

RE: Caldwell Solar Project – Notice of Application

Dear *Name*,

We hope this letter finds you and your family healthy and well. We are contacting you as an adjacent landowner or community stakeholder of the Caldwell Solar Project (Caldwell Solar or the Project) as a notice of application. Caldwell Solar is required to file an application for construction and operation of the proposed facility, subject to the approval of the Kentucky State Siting Board on Electric Generation and Transmission Siting. Caldwell Solar plans to submit the application for construction and operation in the upcoming weeks.

About the Caldwell Solar Project

Caldwell Solar, LLC, a subsidiary of National Grid Renewables Development, LLC (f.k.a Geronimo Energy, LLC) is proposing to construct and operate an up to 200-megawatt solar merchant generation facility. The Project will be located on approximately 3,000 acres in Caldwell County, southeast of Fredonia, near Crider (see enclosed map for Project location). Caldwell Solar will connect to the Caldwell County to Barkley 161kV transmission line owned by Big Rivers Electric Corporation. Permitting for the project will continue through 2022 with the goal of commercial operation as early as 2023.

About the Kentucky State Siting Board on Electric Generation and Transmission Siting

The Caldwell Solar Project is required to file an application for construction and operation of the proposed facility, 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.

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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 solar generation facility 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.

(see page 2 for more information)

8400 NORMANDALE LAKE BLVD, SUITE 1200, BLOOMINGTON, MN 55437
952.988.9000 | WWW.NATIONALGRIDRENEWABLES.COM



Estimated Caldwell Solar Local Economic Impacts During First 25 Years of Operation¹:

- Direct Economic Impact Total Up to Over \$20 Million+
- Tax Revenue: Up to ~\$6.6 million (~\$265,000 annually)
- Jobs: Up to ~7 full-time jobs (~\$490,000 annually)
- Charitable Fund: Up to ~\$800,000 (~\$40,000 annually) - Unique donation for National Grid Renewables projects

Should you have any questions about Caldwell or wish to speak to a member of our staff, please contact us at caldwellsolar@nationalgridrenewables.com or 364-201-2587. You can also mail us at the address listed at the bottom of the page.

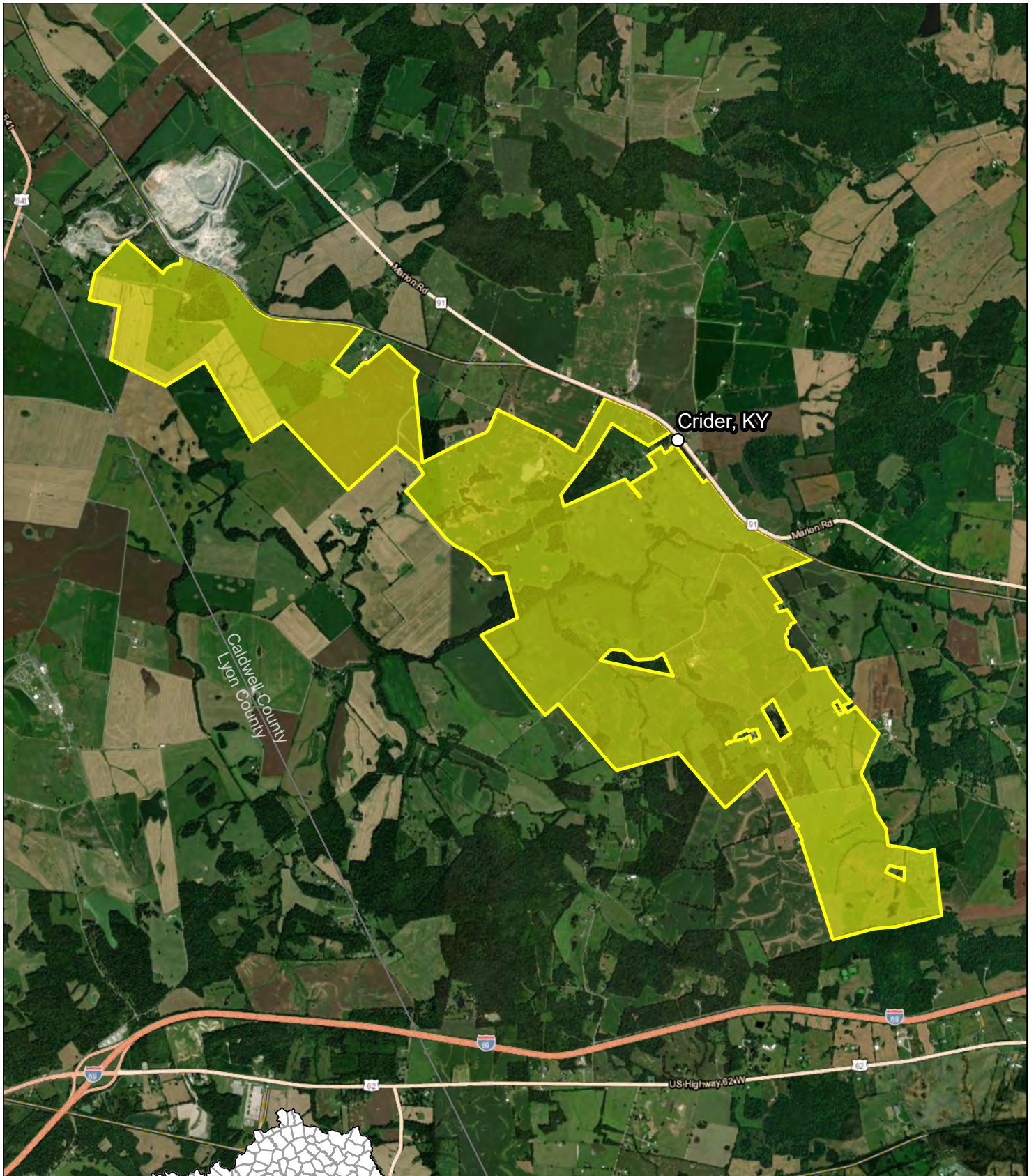
Sincerely,

Courtney Pelissero
Permitting Specialist
952-988-9000
cpelissero@nationalgridrenewables.com

Elle DeBlieck
Developer
952-988-9000
edeblieck@nationalgridrenewables.com

Attachment: Project Map

¹ *Calculations based on National Renewable Energy Laboratory (NREL) JEDI Model, EPA Greenhouse Gas Equivalencies calculator and current Kentucky tax for solar facilities. All calculations are derived using the anticipated project size of up to 200 MW. All data, benefits and calculations are subject to change.



Caldwell Solar

Caldwell County, Kentucky

PIO	First Name	Last Name	Company	Mail Address	Mail State	Mail Zip	ACREAGE	Mail #
17-7A					Fredonia	KY	42411 64.32	USPS TRACKING & CUSTOMER RECEIPT
16-43					Fredonia	KY	42411 0.818	USPS TRACKING & CUSTOMER RECEIPT
16-9 24					Lexington	KY	40503 248	USPS TRACKING & CUSTOMER RECEIPT
					Marion	KY	42064	USPS TRACKING & CUSTOMER RECEIPT
16-47					Princeton	KY	42445 3	USPS TRACKING & CUSTOMER RECEIPT
16-37 & 38					Mt Juliet	TN	37122 0.5	USPS TRACKING & CUSTOMER RECEIPT
16-44					Princeton	KY	42445 1.4	USPS TRACKING & CUSTOMER RECEIPT
26-3E					Fredonia	KY	42411 0.9	USPS TRACKING & CUSTOMER RECEIPT
17-12					Fredonia	KY	42411 1.0	USPS TRACKING & CUSTOMER RECEIPT
8-26					Fredonia	KY	42411 14	USPS TRACKING & CUSTOMER RECEIPT
					Princeton	KY	42445	USPS TRACKING & CUSTOMER RECEIPT
					Princeton	KY	42445	USPS TRACKING & CUSTOMER RECEIPT

26-1		Fredonia	KY	42411	1.15	USPS TRACKING & CUSTOMER RECEIPT
		Fredonia	KY	42411		USPS TRACKING & CUSTOMER RECEIPT
		Princeton	KY	42445		USPS TRACKING & CUSTOMER RECEIPT
16-15D		Princeton	KY	42445	3.54	USPS TRACKING & CUSTOMER RECEIPT
16-15AA		Princeton	KY	42445	1.87	USPS TRACKING & CUSTOMER RECEIPT
9-3		Fredonia	KY	42411	51	USPS TRACKING & CUSTOMER RECEIPT
25-12		Princeton	KY	42445	4.25	USPS TRACKING & CUSTOMER RECEIPT
16-46		Princeton	KY	42445	2.33	USPS TRACKING & CUSTOMER RECEIPT
25-A-1		Princeton	KY	42445	0.11	USPS TRACKING & CUSTOMER RECEIPT
16-25A		Benton	KY	42025	307.72	USPS TRACKING & CUSTOMER RECEIPT
17-8A		Fredonia	KY	42411	134	USPS TRACKING & CUSTOMER RECEIPT
9-3A		Princeton	KY	42445	85	USPS TRACKING & CUSTOMER RECEIPT
26-32A		Fredonia	KY	42411	110	USPS TRACKING & CUSTOMER RECEIPT

8-20		Chicago	IL	USPS TRACKING # & CUSTOMER RECEIPT	
27-6A		Fredonia	KY	USPS TRACKING # & CUSTOMER RECEIPT	42411 86
9-3B 4		Fredonia	KY	USPS TRACKING # & CUSTOMER RECEIPT	42411 142
26-29A		Lexington	KY	USPS TRACKING # & CUSTOMER RECEIPT	46000 34.8
26-11A		Fredonia	KY	USPS TRACKING # & CUSTOMER RECEIPT	42411 0.9
26-30		Fredonia	KY	USPS TRACKING # & CUSTOMER RECEIPT	42411 32.02
26-11		Princeton	KY	USPS TRACKING # & CUSTOMER RECEIPT	42440 1
8-20A		Marion	IL	USPS TRACKING # & CUSTOMER RECEIPT	62959 51.25
8-19		Marion	IL	USPS TRACKING # & CUSTOMER RECEIPT	62959 20
26-15 15A		Fredonia	KY	USPS TRACKING # & CUSTOMER RECEIPT	42411 193.9891
26-4		Wasila	AK	USPS TRACKING # & CUSTOMER RECEIPT	99654 40.71
26-3A & 13		Fredonia	KY	USPS TRACKING # & CUSTOMER RECEIPT	42411 2.8
16-35 & 36		Princeton	KY	USPS TRACKING # & CUSTOMER RECEIPT	42440 0.9999

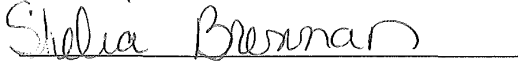
16-20A		Princeton	KY	42445	5.61	USPS TRACKING # & CUSTOMER RECEIPT
16-19		Fredonia	KY	42411	0.81	USPS TRACKING # & CUSTOMER RECEIPT
8-16		Fredonia	KY	42411	149.05	USPS TRACKING # & CUSTOMER RECEIPT
16-22A		Fredonia	KY	42411	0.5017	USPS TRACKING # & CUSTOMER RECEIPT
26-2 & 6B		Fredonia	KY	42411	48.81	USPS TRACKING # & CUSTOMER RECEIPT
26-18		Fredonia	KY	42411	115.97	USPS TRACKING # & CUSTOMER RECEIPT
26-18A		Fredonia	KY	42411	0.15	USPS TRACKING # & CUSTOMER RECEIPT
16-25		Princeton	KY	42445	27.34	USPS TRACKING # & CUSTOMER RECEIPT
16-40		Princeton	KY			USPS TRACKING # & CUSTOMER RECEIPT
17-14		Princeton	KY	42445	177	USPS TRACKING # & CUSTOMER RECEIPT
16-29A		Fredonia	KY	42411	0.00	USPS TRACKING # & CUSTOMER RECEIPT
16-50		Princeton	KY	42445	27	USPS TRACKING # & CUSTOMER RECEIPT
27-8A		Princeton	KY	42445	78.48	USPS TRACKING # & CUSTOMER RECEIPT

26-3F					Fredonia	KY			USPS TRACKING # & CUSTOMER RECEIPT
25-11C					Princeton	KY	42445	2.66	USPS TRACKING # & CUSTOMER RECEIPT
16-23					Fredonia	KY	42411	U.S. PRO	USPS TRACKING # & CUSTOMER RECEIPT
26-12					Fredonia	KY			USPS TRACKING # & CUSTOMER RECEIPT
					Taylor	MI	48180		1
					Fredonia	KY	42411		2
					Fredonia	KY	42411		3
					Fredonia	KY	42411		4
					Princeton	KY	42445		5
					Fredonia	KY	42411		6
					Fredonia	KY	42411		7

- 1 - USPS TRACKING # & CUSTOMER RECEIPT
- 2 - USPS TRACKING # & CUSTOMER RECEIPT
- 3 - USPS TRACKING # & CUSTOMER RECEIPT
- 4 - USPS TRACKING # & CUSTOMER RECEIPT
- 5 - USPS TRACKING # & CUSTOMER RECEIPT
- 6 - USPS TRACKING # & CUSTOMER RECEIPT
- 7 - USPS TRACKING # & CUSTOMER RECEIPT

I, Shelia Brennan, office manager of The Times Leader, a newspaper of general circulation, published in the City of Princeton, County of Caldwell, State of Kentucky, do hereby affirm the legal advertisement emailed electronically to your company was published in the My 29, 2021 edition of The Times Leader.

Shelia Brennan



08/02/21

**Notice of Public Information Meeting
for Proposed Solar Facility**

Caldwell Solar, LLC ("Caldwell Solar"), a subsidiary of National Grid Renewables, has scheduled a public information meeting on June 17, 2021 for community members to learn more about the proposed Caldwell Solar project. The public information meeting open house will be held from 4:00 – 7:00 PM at the University of Kentucky Research and Education Center, 348 University Drive, Room A120, Princeton, KY 42445. If you are not able to attend the public information meeting, please visit <https://nationalgridrenewables.com/caldwell/> to learn more about Caldwell Solar. Caldwell Solar is proposed to be located in Caldwell County, KY, near Crider, KY. Caldwell Solar will consist of an up to 200 MW solar merchant generation facility and will connect to the Caldwell County to Barkley 161 kV transmission line of Big Rivers Electric Corporation. If you have questions or would like to obtain informational handouts that will be provided at the meeting, please contact us at caldwellsolar@nationalgridrenewables.com.



June 1, 2021

Re: Join us for an Open House - Caldwell Solar Project

Dear Name,

We hope this letter finds you and your family healthy and well. We are contacting you as a nearby landowner or stakeholder within Caldwell County to introduce you to or update you on the Caldwell Solar Project (Caldwell Solar or Project), an up to 200 megawatt (MW) solar energy project currently being developed southeast of Fredonia, near Crider (see enclosed map for Project location). Caldwell Solar, LLC is a wholly owned subsidiary of National Grid Renewables, who has a successful history in developing renewable energy projects and boosting local economies in many states across the nation - and we would like to present the same opportunity to your community.

WHY WE ARE CONTACTING YOU

We would like to invite you to an upcoming public information meeting (details below). The purpose of this public information meeting is to inform you of the proposed Caldwell Solar Project and seek your feedback regarding the project plan. The dissemination of information regarding our planned local solar energy development is very important to us, as is the health and safety of community members near our projects. If you are not comfortable attending the open house meeting in person or unavailable that evening, please visit our project website at <https://nationalgridrenewables.com/caldwell/> or email us at caldwellsolar@nationalgridrenewables.com to learn more about Caldwell Solar.

Upcoming Open House Event

Date: Thursday, June 17, 2021

Time: 4:00 p.m. – 7:00 p.m. Open house format – come and go as you please.

Location: University of Kentucky Research and Education Center, 348 University Drive, Room A120, Princeton, KY 42445

ABOUT NATIONAL GRID RENEWABLES

National Grid Renewables, which includes the renewables development company formerly known as Geronimo Energy, is a leading North American renewable energy company based in Minneapolis, Minnesota, with satellite offices located throughout multiple states in the regions where it develops, constructs, and operates. As a farmer-friendly and community focused company, National Grid Renewables develops projects for corporations and utilities that seek to repower America's electricity grid by reigniting local economies and reinvesting in a sustainable future. National Grid Renewables is part of the competitive, unregulated Ventures division of National Grid and has a robust portfolio of solar, wind, and energy storage projects located throughout the United States in various stages of development, construction, and operation.

We look forward to introducing the Caldwell Solar Project to you and your community.

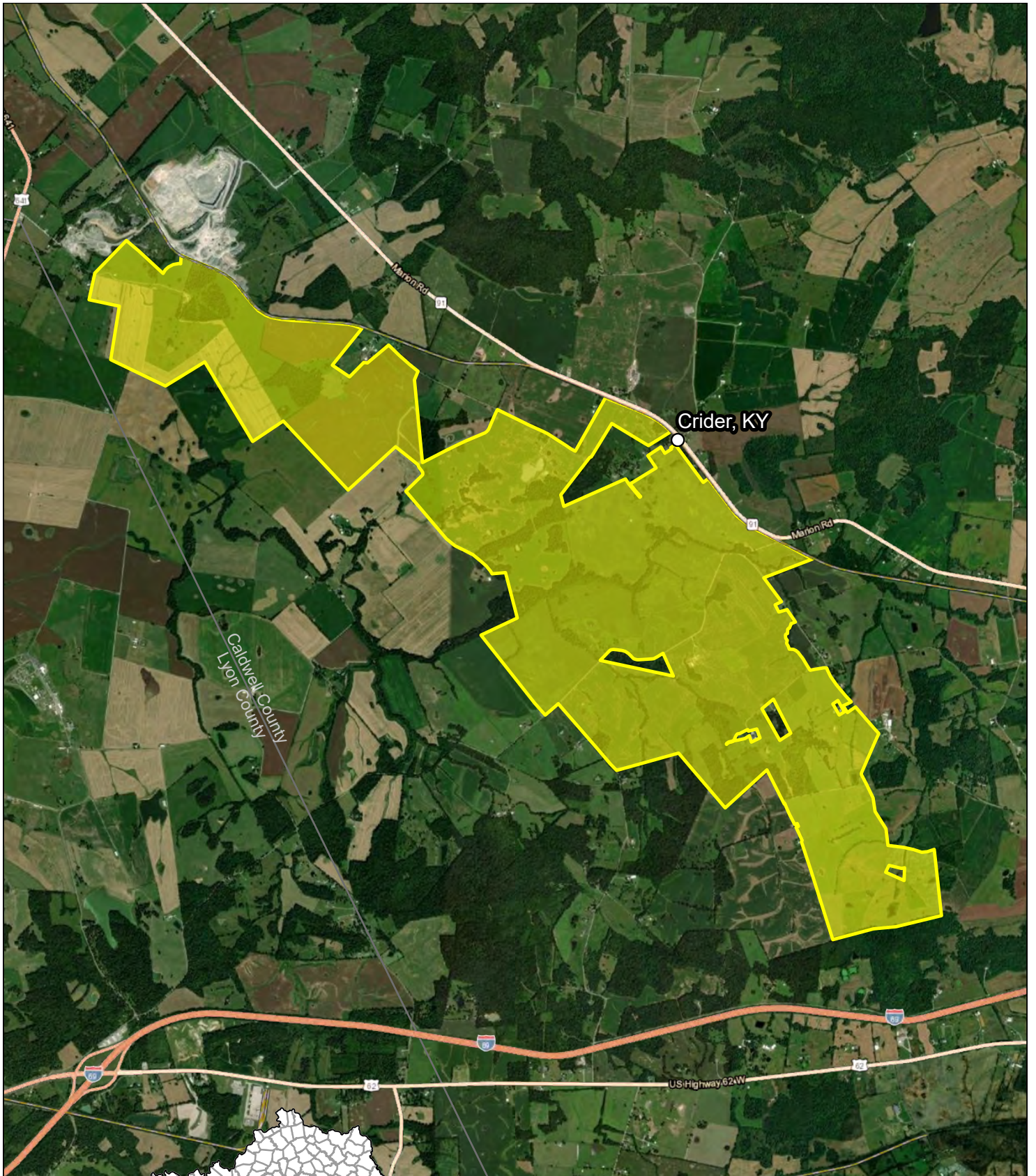
Sincerely,

A handwritten signature in cursive script that reads "Courtney Pelissero".

Courtney Pelissero
Permitting Associate
952.988.9000

A handwritten signature in cursive script that reads "Elle DeBlicke".

Elle DeBlicke
Associate Developer
952.988.9000



Caldwell Solar

Caldwell County, Kentucky

PID	First Name	Last Name	Company	Mail Address	Mail State	Mail Zip	ACFEAGE	Mail #
17-7A					Fredonia	KY	USPS TRACKING & CUSTOMER RECEIPT	
16-43					Fredonia	KY	USPS TRACKING & CUSTOMER RECEIPT	
16-9 24					Lexington	KY	USPS TRACKING & CUSTOMER RECEIPT	
					Marion	KY	USPS TRACKING & CUSTOMER RECEIPT	
16-47					Princeton	KY	USPS TRACKING & CUSTOMER RECEIPT	
16-37 & 38					Mt Juliet	TN	USPS TRACKING & CUSTOMER RECEIPT	
16-44					Princeton	KY	USPS TRACKING & CUSTOMER RECEIPT	
26-3E					Fredonia	KY	USPS TRACKING # & CUSTOMER RECEIPT	
17-12					Fredonia	KY	USPS TRACKING # & CUSTOMER RECEIPT	
8-26					Fredonia	KY	USPS TRACKING # & CUSTOMER RECEIPT	
					Princeton	KY	USPS TRACKING # & CUSTOMER RECEIPT	
					Princeton	KY	USPS TRACKING # & CUSTOMER RECEIPT	

26-1		Fredonia	KY	USPS TRACKING & CUSTOMER RECEIPT
		Fredonia	KY	USPS TRACKING & CUSTOMER RECEIPT
		Princeton	KY	USPS TRACKING & CUSTOMER RECEIPT
16-15D		Princeton	KY	USPS TRACKING & CUSTOMER RECEIPT 42445
16-15AA		Princeton	KY	USPS TRACKING & CUSTOMER RECEIPT 42445
9-3		Fredonia	KY	USPS TRACKING & CUSTOMER RECEIPT 42411
25-12		Princeton	KY	USPS TRACKING & CUSTOMER RECEIPT 42445
16-46		Princeton	KY	USPS TRACKING & CUSTOMER RECEIPT 42445
25-A-1		Princeton	KY	USPS TRACKING & CUSTOMER RECEIPT 42445
16-25A		Benton	KY	USPS TRACKING & CUSTOMER RECEIPT 42025
17-8A		Fredonia	KY	USPS TRACKING & CUSTOMER RECEIPT 42411
9-3A		Princeton	KY	USPS TRACKING & CUSTOMER RECEIPT 42445
26-32A		Fredonia	KY	USPS TRACKING & CUSTOMER RECEIPT 42411

26-32		Fredonia	KY	42411	USPS TRACKING & CUSTOMER RECEIPT
16-7		Harrisburg	IL	62946	USPS TRACKING & CUSTOMER RECEIPT
17-7B		Princeton	KY	42445	USPS TRACKING & CUSTOMER RECEIPT
17-13A		Princeton	KY	42445	USPS TRACKING & CUSTOMER RECEIPT
26-17		Fredonia	KY	42411	USPS TRACKING # & CUSTOMER RECEIPT
16-45A		Princeton	KY	42445	USPS TRACKING # & CUSTOMER RECEIPT
16-41		Fredonia	KY	42411	0.4813
27-3A		Princeton	KY	42445	83.37
16-34		Princeton	KY	42445	0.0000
16-39A		Princeton	KY	42445	
16-30 31 32		Fredonia	KY	42411	1.3126
26-16		Princeton	KY	42445	72
26-30A		Fredonia	KY	42411	56.97

8-20	Chicago	IL	60631	0	USPS TRACKING & CUSTOMER RECEIPT
27-6A	Fredonia	KY	42411	86	USPS TRACKING & CUSTOMER RECEIPT
9-3B 4	Fredonia	KY	42411	142	USPS TRACKING & CUSTOMER RECEIPT
26-29A	Lexington	KY	40505	34.8	USPS TRACKING & CUSTOMER RECEIPT
26-11A	Fredonia	KY	42411	0.27	USPS TRACKING & CUSTOMER RECEIPT
26-30	Fredonia	KY	42411	32.02	USPS TRACKING & CUSTOMER RECEIPT
26-11	Princeton	KY	42445	1	USPS TRACKING & CUSTOMER RECEIPT
8-20A	Marion	IL	62959	51.25	USPS TRACKING & CUSTOMER RECEIPT
8-19	Marion	IL	62959	20	USPS TRACKING & CUSTOMER RECEIPT
26-15 15A	Fredonia	KY	42411	193.9891	USPS TRACKING & CUSTOMER RECEIPT
26-4	Wasilla	AK	99654	40.71	USPS TRACKING & CUSTOMER RECEIPT
26-3A & 13	Fredonia	KY	42411	2.8	USPS TRACKING & CUSTOMER RECEIPT
16-35 & 36	Princeton	KY	42445	0.9999	USPS TRACKING & CUSTOMER RECEIPT

16-20A		Princeton	KY	42445	5.61	USPS TRACKING & CUSTOMER RECEIPT
16-19		Fredonia	KY	42411	0.81	USPS TRACKING & CUSTOMER RECEIPT
8-16		Fredonia	KY	42411	149.05	USPS TRACKING & CUSTOMER RECEIPT
16-22A		Fredonia	KY	42411	0.5017	USPS TRACKING & CUSTOMER RECEIPT
26-2 & 6B		Fredonia	KY	42411	48.81	USPS TRACKING & CUSTOMER RECEIPT
26-18		Fredonia	KY	42411	115.87	USPS TRACKING & CUSTOMER RECEIPT
26-18A		Fredonia	KY	42411	5.13	USPS TRACKING & CUSTOMER RECEIPT
16-25		Princeton	KY	42445	27.34	USPS TRACKING & CUSTOMER RECEIPT
16-40		Princeton	KY	42445	3	USPS TRACKING & CUSTOMER RECEIPT
17-14		Princeton	KY	42445	177	USPS TRACKING & CUSTOMER RECEIPT
16-29A		Fredonia	KY	42411	6.07	USPS TRACKING & CUSTOMER RECEIPT
16-50		Princeton	KY	42445	27	USPS TRACKING & CUSTOMER RECEIPT
27-8A		Princeton	KY	42445	78.48	USPS TRACKING & CUSTOMER RECEIPT

26-3F				USPS TRACKING & CUSTOMER RECEIPT	
		Fredonia	KY	42411	0.83
25-11C				USPS TRACKING # & CUSTOMER RECEIPT	
		Princeton	KY	42445	2.66
18-23					
		Fredonia	KY	42411	0.6 no address
26-12					
		Fredonia	KY	42411	0.618 no adress



Caldwell Solar Public Information Meeting

June 17th, 2021



Agenda



- ✓ **Introduction to National Grid Renewables**
- ✓ **Solar Energy Project Development and Components**
- ✓ **Caldwell Solar Project Details and Benefits**
- ✓ **Kentucky Permitting Process**
- ✓ **Solar Energy Project Construction**
- ✓ **Solar Energy Project Operations**

Introduction

Introduction to National Grid Renewables

Expertise as Top U.S. Renewable Energy Company

- National Grid Renewables is a leading North American independent developer and operator of utility-scale renewable energy and battery storage projects
- National Grid Renewables includes the renewable energy development company formerly known as Geronimo Energy, whose team has successfully developed over 2,800 megawatts (MW) of wind and solar projects that are currently in operation or under construction
- We are experts in renewable energy project development, construction and operations
- The robust National Grid Renewables pipeline stretches across the United States, including projects in advanced development phases



Brooten Community Solar

Farmer-Friendly, Community-Driven



Development

Solar Energy Project Development and Components Overview

The What, How, and Why of National Grid Renewables

Development: Siting Process

- ✓ Willing landowner(s) and supportive community
- ✓ Proximity to existing electrical infrastructure
- ✓ Marketability to power purchasers
- ✓ Compelling solar resource
- ✓ Large, flat parcels of land
- ✓ Minimal impact to environmental features



Solar Project Components: Modules/Panels

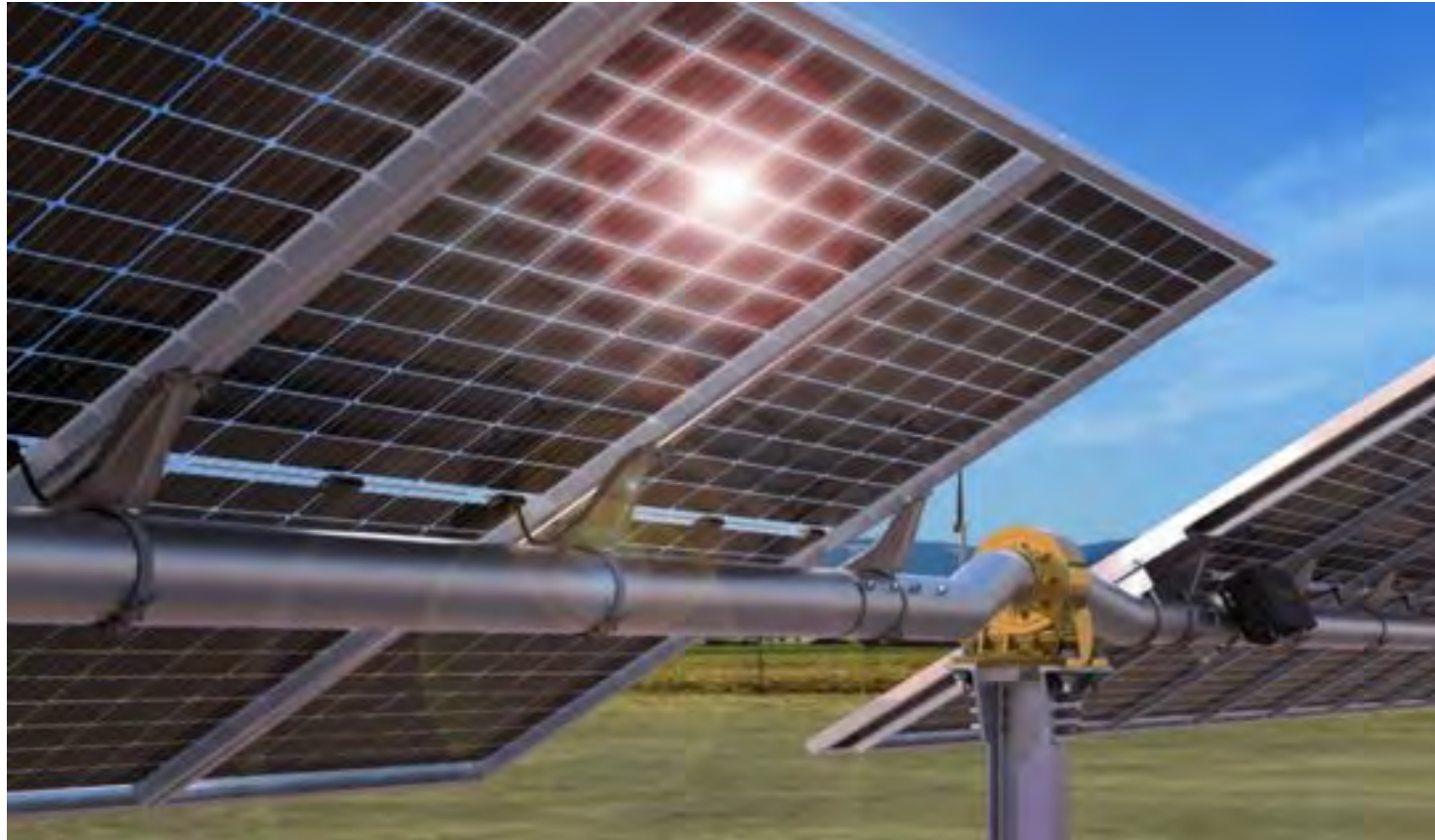


Photo from Greentech Media

Solar Project Components: Inverters



Solar Project Components: Racking



Fixed Tilt



Tracking

Solar Project Components: Access Roads



Solar Project Components: Electrical Components and Points of Interconnection



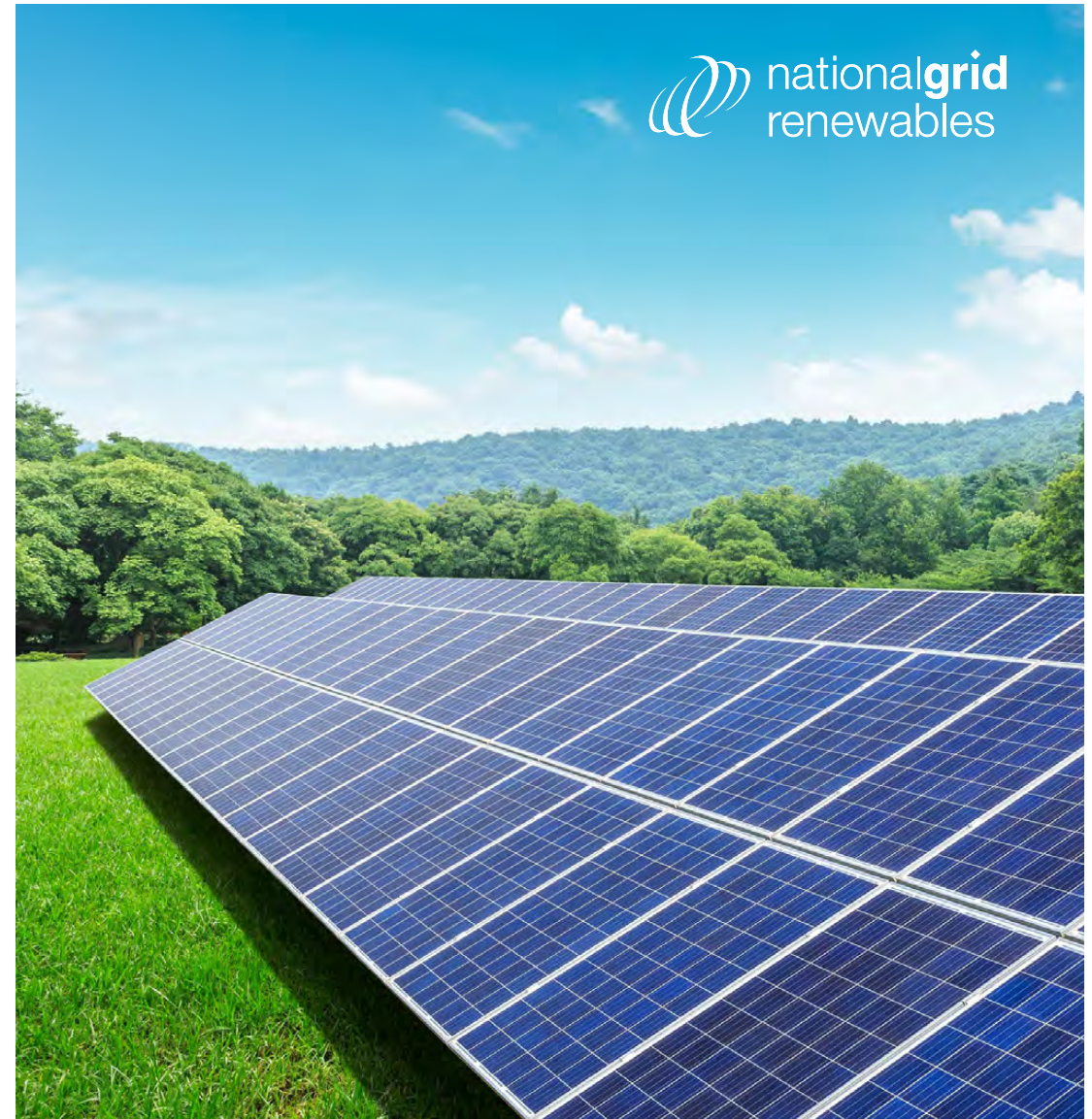
Photo from PV Magazine

Caldwell Solar

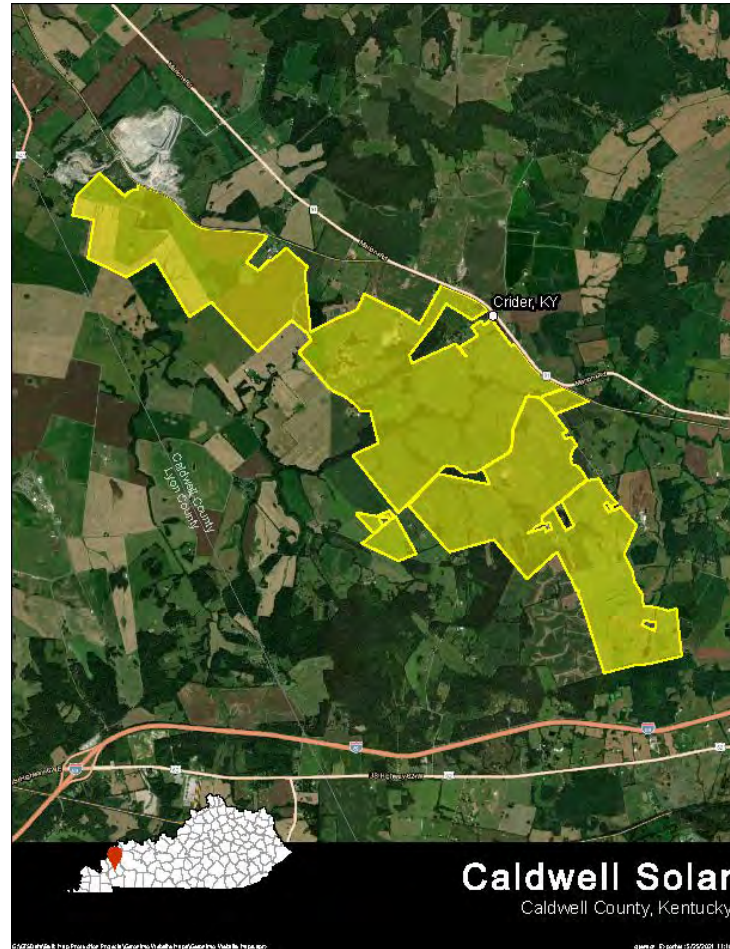
Project Details and Benefits

Caldwell Solar: Project Details

- **Operational Capacity:** Up to 200 Megawatts (MW)
- **Location:** Caldwell County, KY
- **Expected Commercial Operation Date:** November 2023
- **Carbon Dioxide Emissions Offset:** ~306,000 metric tons annually* (the equivalent of taking ~66,000 cars off the road)
- **Kentucky Public Service Commission/Siting Board Case #:** 2020-00244
- **Interconnection:** Connecting to Big Rivers Electric infrastructure
- **Offtake:** Power is contracted to a commercial and industrial user



Caldwell Solar: Project Map



Caldwell Solar: Project Economic Benefits



Estimated Tax Revenue: ~\$6.6 million over 25 years of operation



Capital Investment: ~\$317 million



Full-Time Equivalent Jobs: ~7 jobs created



Temporary Jobs: ~300 construction jobs created



Increased local spending



Education Fund: ~\$800,000 over 20 years (~\$40,000 annually); Unique to National Grid Renewables

Solar Projects Are Good Neighbors

- Does not require additional services, so no pressure on local services or resources
- Low profile, no more than 15-18 feet at the highest
- No harmful pollutants or negative health impacts
- Odorless and minimal sound produced
- No air or water emissions
- Perennial plantings increase soil stability, improve infiltration, and help promote biodiversity



Permitting

Kentucky Permitting Process Overview

How Large-Scale Renewables are Permitted in Kentucky

Permitting: Siting Board Process

Overview

- The Kentucky State Board on Electric Generation and Transmission Siting (the Siting Board) issues certificates for the construction of electric generation facilities and transmission lines that are not regulated by the Kentucky Public Service Commission (KY PSC)

Siting Board

- **The Siting Board is made up of:**
 1. The three members of the KY PSC
 2. Secretary of the KY Energy & Environment Cabinet (or their designee)
 3. Secretary of the KY Economic Development Cabinet (or their designee)
 4. Two local, ad hoc members appointed by the Governor
 - County Planning Commission Chair or Judge Executive
 - Resident of the County



Permitting: Siting Board Process & Local Permitting

The Siting Board Review Focuses On:

- Public Engagement and Outreach
- Noise and Visual Impacts
- Setback Requirement
- Economic Impacts
- Impact on the Kentucky Electric Transmission Grid
- Compliance with Local Land Use Regulations

Caldwell County:

- Caldwell County does not have zoning or land use regulations



Permitting: Typical Studies & Research



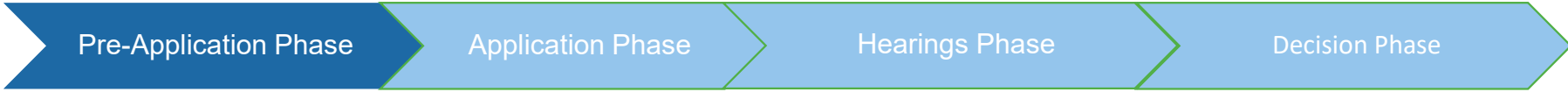
- Wetlands, Waters, and Streams: **In Process**
 - Wetland and Stream Delineation
- Cultural Resources: **In Process**
 - Archaeological Resources
 - Phase 1A/1B Study
 - Historic Architecture
- Wildlife and Habitat: **In Process**
- Land Use & Property Values: **Fall 2021**
- Noise Evaluation: **Fall 2021**
- Transportation Impact: **Fall 2021**
- Visual Effects: **Fall 2021**
- Economic Impact: **Fall 2021**



Permitting: Siting Board Process and Timeline

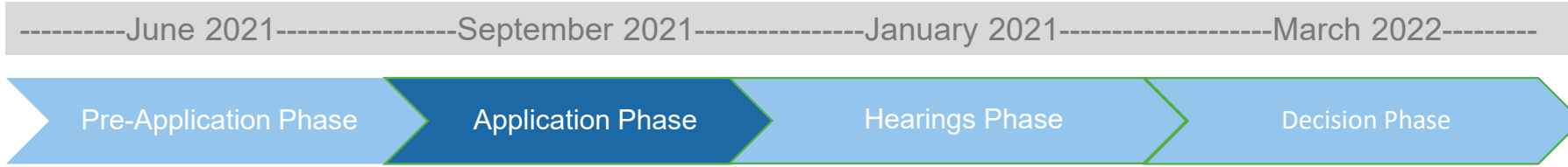


-----June 2021-----September 2021-----January 2021-----March 2022-----



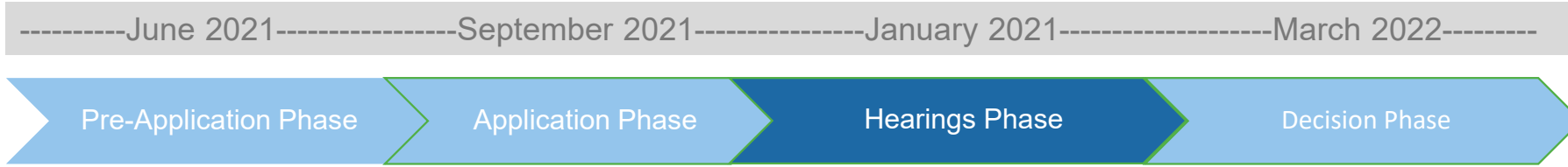
- Environmental studies
- Public Information Meeting
- Notice of Intent

Permitting: Siting Board Process and Timeline



- Application for Construction Certificate submitted
- Siting Board reviews application for completeness
- State hired consultants review application and request more information from applicant if needed

Permitting: Siting Board Process and Timeline

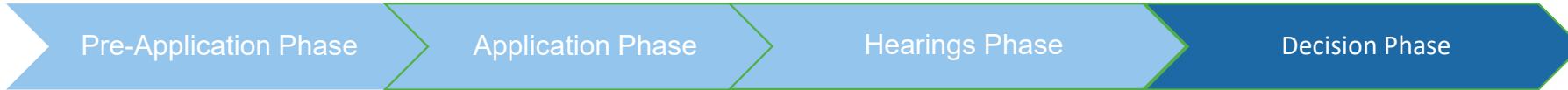


- Local public hearing held, if requested
- Evidentiary hearing held at KY Public Service Commission office, if requested

Permitting: Siting Board Process and Timeline



-----June 2021-----September 2021-----January 2021-----March 2022-----



- Siting Board decision on Construction Certificate due within 180 days of application submittal

Construction

Solar Energy Project Construction Overview

How We Construct Safely and Respectfully

Construction: Components

Timeline

- Construction typically takes 12-18 months

Solar Projects Generally Consist of:

- Site preparation
- Pier installation
- Racking installation
- Module installation
- Interconnection
- Re-vegetation



Construction: Site Preparation



Delphinus Community Solar



WasecaSun Community Solar

Construction: Erosion Control



Bingham Solar



Construction: Pier Installation



DodgeSun Community Solar



Rosemount Community Solar

Construction: Racking Installation



Deneb Community Solar



Bingham Solar

Construction: Module Installation



St. Cloud Community Solar



Sunrise Community Solar

Construction: Electrical Collection

Overview

- Electrical collection system will be installed below-ground, above-ground, or a combination of both

Below-Ground Collection:

- Panels deliver direct current (DC) power to the inverters through cabling in a trench
- Alternating current (AC) collection from inverter skids to substation trenched or ploughed



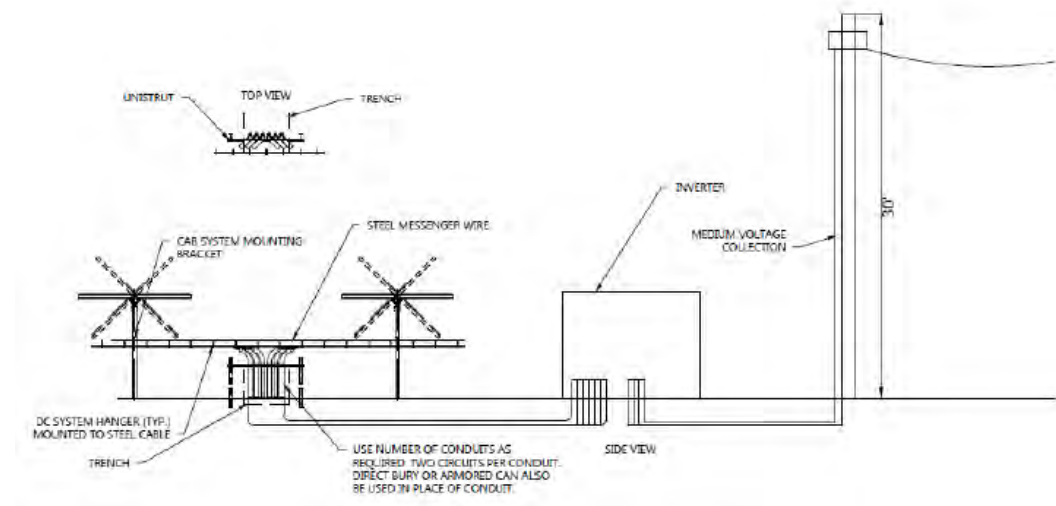
Construction: Electrical Collection

Above-Ground Collection:

- DC collection strung under panels on steel arms/cable attached to piles and routed to assigned inverter/transformer skid
- AC collection from inverter skids to substation on distribution-type pole

Hybrid Collection:

- DC strung under panels and routed to assigned inverter/transformer skid
- AC collection from inverter skids to substation
trenched or ploughed



Construction: Restoration and Re-vegetation



Koppelman Community Solar



St. John's Solar

Operations

Solar Energy Project Operations Overview

How We Operate Safe and Productive Projects

Operations: Vegetation Management

- Typically planted with a low growing seed mix
- Vegetation is maintained for the life of the project, including for visual impact mitigation
- Site inspections take place up to three times per year to assess growth and perform care if needed, including spot treatment for weeds
- Sites are generally mowed several times per year
- Components are removed and reused or recycled at the end of the project's useful life
- The site can be restored to its previous use, or another use based on landowner wishes
- Soil quality generally has improved on sites previously used for agriculture as soils have rested and lain fallow during the project's life





Caldwell Solar

8400 Normandale Lake Blvd., Suite 1200

Bloomington, MN 55438

caldwellsolar@nationalgridrenewables.com

364.201.2587



for 200 MW Solar Project

Producing home-grown, clean, renewable energy in Kentucky.

During Development:

(assumes a five year development period)

~\$100,000
on sponsorships, marketing, travel, meals, legal fees, office, county records, local engineering, and environmental consulting services

During Construction:

Capital Infrastructure Investment ~\$317 million	~300 construction and related services jobs
Economic impact diversity across Kentucky, including	Millions of Dollars estimated funds spent towards local spending



During Operation: ~\$19.7 Million Direct Impact Over 25 Years

7 Full-time Jobs
(\$12.25 million in wages over 25 years)

~\$800,000 Over 20 Years
(~\$40,000 annually)

Charitable Fund

~\$6.6 million Over 25 Years*
(~\$265,000 annually)

Tax Revenue distribution projections:

School Districts \$4.8 million over 25 years, or \$193,000 per year	State \$800,000 over 25 years, or \$32,000 per year
	Local Counties \$1 million over 25 years, or \$40,000 per year

*Calculations based on National Renewable Energy Laboratory (NREL) JEDI Model, EPA Greenhouse Gas Equivalencies calculator and current Kentucky tax for solar facilities. Subject to change.

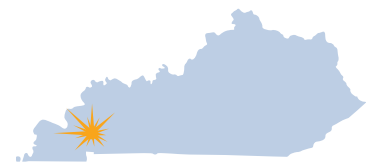


PROJECT OVERVIEW

The Caldwell Solar Project is a 200 megawatt (MW) solar development located in Caldwell County, Kentucky. Caldwell will span approximately 2,000 acres and will be connected to the Caldwell County to Barkley Big Rivers 161kV transmission line. The project is anticipated to positively impact the environment by using a variety of sustainable development practices, as well as the local economy by producing tax revenue, jobs, and contributions through an education fund. Caldwell is estimated to offset approximately 306,000 metric tons of carbon dioxide emissions annually during operations - the equivalent of taken an estimated 66,000 cars off the road every year.

PROJECT DETAILS

Caldwell Solar will provide energy and capacity for the transmission network and will connect to the electric grid at the Caldwell County to Barkley Big Rivers 161kV transmission line. Caldwell will provide a cost effective alternative to fossil fuels. Caldwell's project footprint will consist of approximately 2,000 acres signed under agreement and has ideal conditions for solar energy generation.



PROJECT SPECIFICATIONS

Operational Capacity: 200 MW

Location: Caldwell County, KY

Direct Economic impact:
approximately \$19.7 million over 20 years

Targeted Construction Timeline:
2022

Targeted COD: 2023

Carbon Dioxide Emissions Offset: ~306,000 metric tons annually*

*Calculations based on the National Renewable Energy Laboratory (NREL) JEDI Model, EPA Greenhouse Gas Equivalencies calculator and current Kentucky tax for solar facilities. Subject to change.

ABOUT NATIONAL GRID RENEWABLES

National Grid Renewables, which includes the renewables development company formerly known as Geronimo Energy, is a leading North American renewable energy company based in Minneapolis, Minnesota, with satellite offices located throughout multiple states in the regions where it develops, constructs, and operates. As a farmer-friendly and community focused company, National Grid Renewables develops projects for corporations and utilities that seek to repower America's electricity grid by reigniting local economies and reinvesting in a sustainable future. National Grid Renewables is part of the competitive, unregulated Ventures division of National Grid and has a robust portfolio of solar, wind, and energy storage projects located throughout the United States in various stages of development, construction and operation.

KENTUCKY'S ELECTRIC GENERATION & TRANSMISSION SITING PROCESS

A Guide to Public Participation



**Kentucky State Board on Electric Generation
and Transmission Siting**

ABOUT THE SITING BOARD

The Kentucky State Board on Electric Generation and Transmission Siting (the Siting Board) was created in 2002 by an act of the Kentucky General Assembly. Its purpose is to review applications and, as appropriate, grant certificates for the construction of electric generating facilities and transmission lines that are not regulated by the Kentucky Public Service Commission.

Siting Board review focuses on three areas:

- Environmental matters not covered by permits issued by the Kentucky Department for Environmental Protection. The Department issues permits for air emissions, water withdrawals and discharges and solid waste disposal. (The Department processes are explained briefly later in this guide.) The Siting Board review covers matters such as noise and visual impacts, among others.
- Economic impacts.
- Impact of the proposed facility on Kentucky's electric transmission grid.

The generating facilities reviewed by the Siting Board sell power on the wholesale market and are commonly known as merchant power plants or independent power producers (IPPs). Siting Board approval is required for merchant plants with a generating capacity of 10 megawatts or more and for non-regulated transmission lines capable of carrying 69,000 volts or more.

The Siting Board is headquartered at the Kentucky Public Service Commission. The PSC staff also serves as staff to the Siting Board. The Siting Board's operations are funded through fees paid by applicants.

All documents submitted to the Siting Board are filed electronically and are available at the board's Web site:

<http://psc.ky.gov/Home/EGTSB>

Siting Board hearings and other proceedings may be viewed live via the Internet.

The Siting Board review of applications is designed to include public participation throughout the process. The Siting Board welcomes and encourages public participation. This guide is intended to explain the siting process and the opportunities for public participation.

The Siting Board may be contacted at:

Kentucky State Board on Electric
Generation and Transmission Siting

211 Sower Boulevard

P.O. Box 615

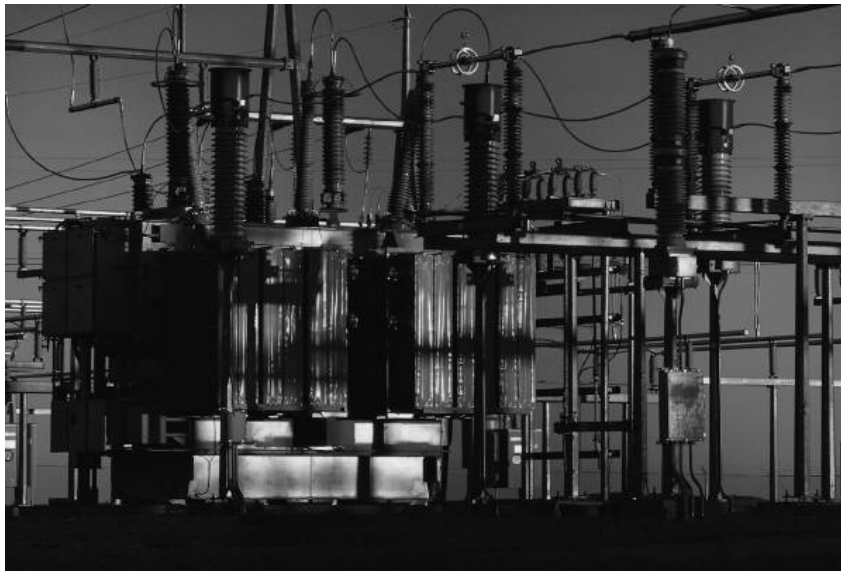
Frankfort, KY 40602

502-564-3940

Toll-free 1-800-772-4636

Fax (502) 564-3460

psc.ky.gov



MEMBERSHIP OF THE SITING BOARD

The Siting Board has five permanent *ex officio* members and two *ad hoc* members who are appointed by the Governor to review specific applications. The permanent *ex officio* members are:

- The three members of the Kentucky Public Service Commission. The chairperson of the PSC also chairs the Siting Board.
- The secretary of the Kentucky Environmental and Public Protection Cabinet , or his designee
- The secretary of the Kentucky Cabinet for Economic Development, or his designee

The two *ad hoc* members of the board are appointed as follows:

If the facility is located within a single county, the *ad hoc* members shall be:

- The chairperson of the planning commission with jurisdiction over the proposed site. If no planning commission exists for the site, the Governor may name either the county judge/executive or, if the proposed facility is within the limits of a city, the mayor of the city.
- A resident of the county in which the facility is proposed to be located.

If the proposed site for the facility is located in more than one county, the *ad hoc* members shall be:

- The county judge/executive of one of the counties, chosen by a majority vote of the county judge/executives of all the counties in which the facility is proposed.
- A resident of a county in which the facility is proposed to be located.

The *ad hoc* members serve only for the duration of the case for which they were appointed.

THE SITING APPLICATION PROCESS

NOTICE OF INTENT

Anyone planning to apply for certification from the Siting Board must submit a Notice of Intent at least 30 days before submitting the application. The notice, which is made public, must include a brief description of the proposed facility and its location, and should disclose the identity of any consultants retained to conduct analyses for the applicant. It also must identify the Local Planning and Zoning Authority and provide notice of any requested deviations from

state setback requirements. When a notice is deemed complete, the Siting Board contacts the Governor and the county and city governments where the proposed facility would be located. The *ad hoc* members of the Siting Board are to be appointed during the notice period. The Siting Board also will use the notice period to engage any consultants it may require to assist in evaluating the application.

APPLICATION

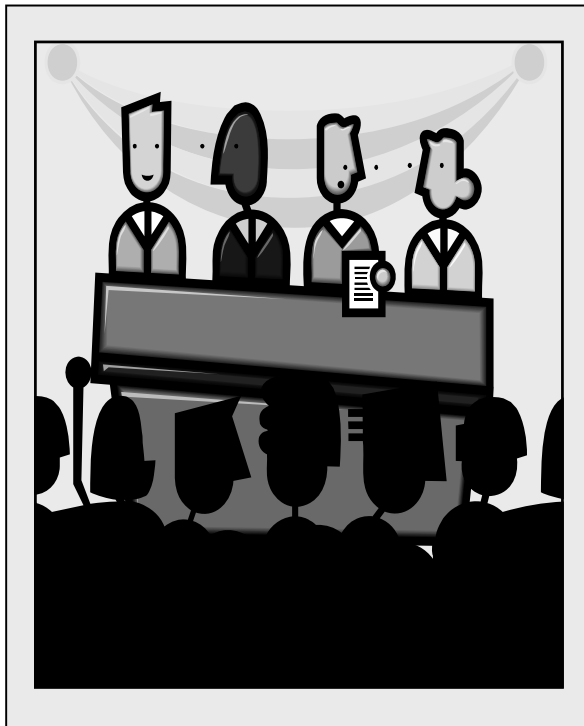
Application for a certificate from the Siting Board may be made 30 days after the filing of a completed Notice of Intent. The application must contain certain information, including:

- Evidence that public notice of the application has been made
- A report on public involvement activities conducted by the applicant
- A site assessment report containing a detailed description of the project and thorough analysis of the impacts to be considered by the Siting Board (visual impacts, traffic, property values, etc.)
- A statement of compliance with any local zoning regulations and noise control ordinances
- An analysis of the effects of the proposed facility on the electric transmission grid
- An analysis of the economic impacts of the proposed facility
- Disclosure of past environmental violations by the applicants

HEARINGS

Evidentiary hearing

An evidentiary hearing will be held upon the written request of a party to the case or on the motion of the Siting Board itself. It must be requested within 30 days of the filing of a completed application. The evidentiary hearing is a formal proceeding, with participation limited to the applicants and the parties to the case (intervenors). Testimony is taken under oath. It may be held in the county where the proposed facility would be located or in Frankfort at the Public Service Commission's offices.



Local public hearing

This is an informal proceeding held to give the general public an opportunity to be heard by the Siting Board. A local public hearing will be held if requested by a local government entity – city, county or planning and zoning authority – or by at least three residents of the city or county in which the proposed facility would be located. Requests must be made in the form of a letter to the Siting Board. The local public hearing must be requested within 30 days of the filing of a completed application. It must be held within 60 days of the filing date, with 20 days' advance notice given to the public of the date, time and location of the hearing. The local public hearing will be held within the county in which the facility is proposed. If the facility spans more than one county, the local public hearing will be held in the most populous county.

How to submit comments

There is no requirement to sign up in advance to speak at a local public hearing. However, those wishing to speak will be asked to sign up upon arrival at the hearing. The time allocated to each speaker may be limited in order to allow everyone who wishes to comment to be heard.

The most helpful comments are those which:

- Are clear, concise and to the point.
- Address matters under Siting Board jurisdiction, rather than those under the purview of the Kentucky Department for Environmental Protection.
- Address specific aspects of the proposed facility, rather than simply general support or opposition.
- Suggest ways to remedy any perceived shortcomings in the application.



Comments also may be submitted to the Siting Board in writing. People with extensive, detailed comments are encouraged to submit them in writing to:

Kentucky State Board on Electric Generation and Transmission Siting

211 Sower Boulevard

P.O. Box 615

Frankfort, KY 40602

Fax (502) 564-3460

psc.ky.gov

INTERVENORS

Any interested party may apply to the Siting Board to become an intervenor in the proceeding. The request must be made in writing within 30 days of the filing of a completed application. Intervenors can be, but are not limited to, residents of the city or county in which the proposed facility would be located. Intervenors have the right to participate fully in the board proceedings. This includes the right to file requests for information from the applicant or other parties and to cross-examine witnesses during formal proceedings of the Siting Board. Parties to a case before the Siting Board also have the right to appeal the Siting Board decision to the Circuit Court in the county in which the facility is proposed to be located.

THE SITING BOARD DECISION

The Siting Board is required to make its decision no later than 120 days after the submission of a complete application. The Siting Board will consider information submitted by the applicant, evidence and public comments from the hearings, other public comments and reports submitted by consultants to the Siting Board. The Siting Board also may conduct its own inspection of the location for the proposed facility.

The Siting Board may accept or deny an application as submitted, order mitigation measures to reduce impacts and allow deviations from setback requirements. The Siting Board may not order relocation of a proposed facility.



THE SITING BOARD PROCESS SUMMARY/TIMELINE

-30 DAYS

NOTICE OF INTENT FILED

**AD HOC BOARD MEMBERS,
CONSULTANTS SELECTED**

0 DAYS

APPLICATION FILED

FILINGS FOR INTERVENORS

30 DAYS

DEADLINE FOR REQUESTING HEARINGS

NOTICE OF PUBLIC HEARINGS

60 DAYS

DEADLINE FOR PUBLIC HEARINGS

BOARD CONSULTANTS FILE REPORTS

120 DAYS

BOARD DECISION DUE

+30 DAYS

DEADLINE FOR FILING APPEALS



THE ROLE OF THE KENTUCKY DEPARTMENT FOR ENVIRONMENTAL PROTECTION

The law creating the Siting Board does not alter the role of Kentucky Department for Environmental Protection in granting permits for electric generating facilities. The required permits include those for:

- Air emissions
- Wastewater discharges
- Water withdrawal
- Solid waste disposal

It is likely that some or all of these permits may have been granted prior to application being made to the Siting Board. Therefore, members of the public interested in electric generation facility siting issues should not rely solely on the Siting Board process to gain notice of or comment upon such facilities.

The Department has its own procedures for gathering public input on pending permit applications. They are as described on the chart on the following page.

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Similarly, the Siting Board does not have jurisdiction over matters that fall under the authority of other state or federal agencies. Such issues include, but are not limited to:

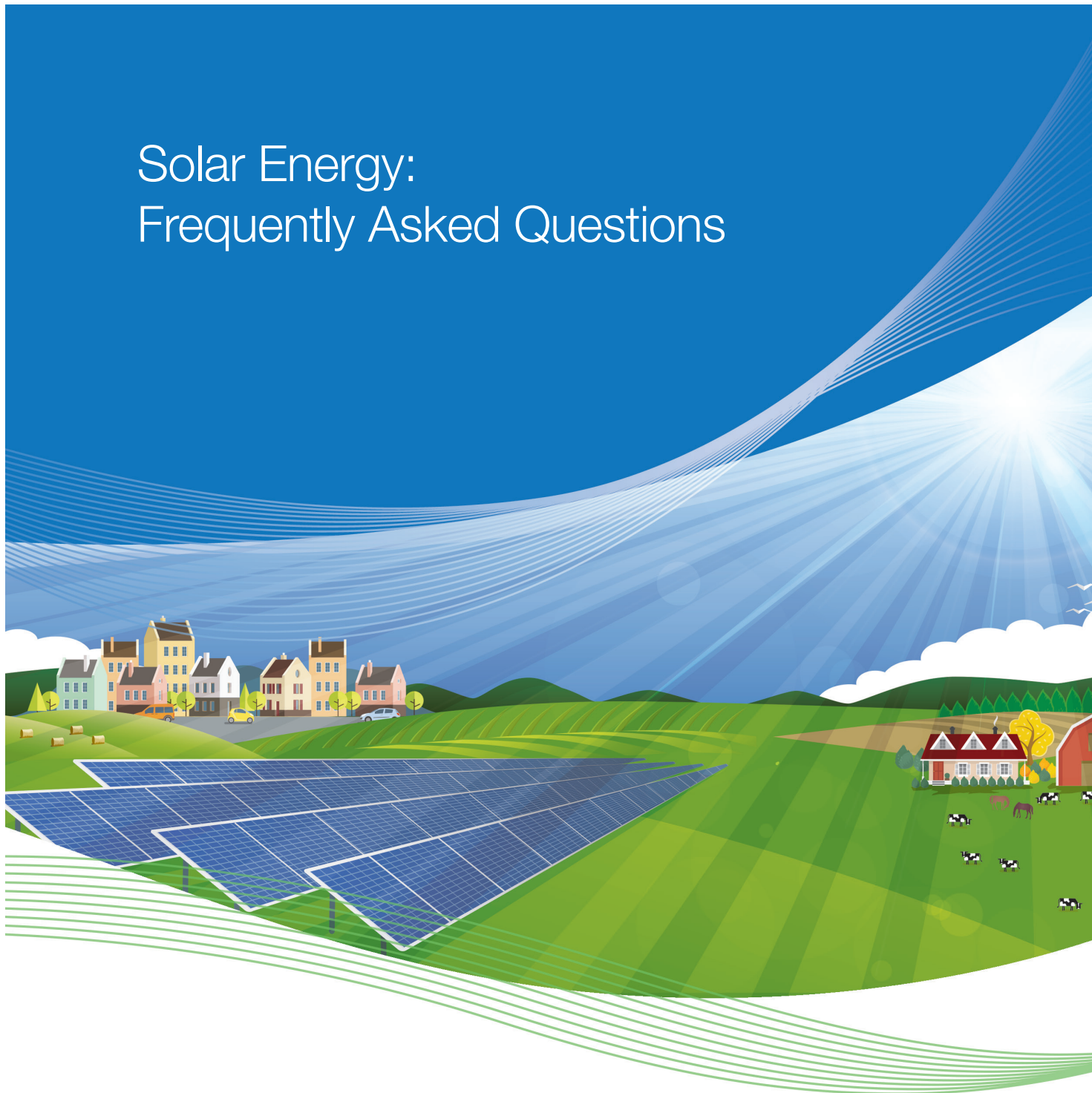
- Endangered or threatened species
- Historic preservation
- Aviation safety

Public Input Opportunities for Each of the DEP Permits Typically Issued to Kentucky Power Plants

Type of Permit	Public Comment Periods (Opportunities to submit written comments)	Public Hearing Opportunities (Opportunities to present verbal comments)
Air Quality Permit	30 day public comment period on the draft permit	Members of the public can request a hearing during the public comment period. DEP may self-initiate a public hearing if there is significant public interest.
KPDES Permit for Wastewater Discharge	30 day public comment period on the draft permit	Members of the public can request a hearing during the public comment period or DEP may self-initiate a public hearing if there is significant public interest.
Special Waste Landfill Permit for Ash Management	30 day public comment period notice when application is administratively complete. 30 day public comment period on the draft permit.	Members of the public can request an informational hearing with the Department during the permit application public comment period. Members of the public can request a hearing with a Cabinet Hearing Officer during the draft permit public comment period.
Water Withdrawal Permit (Non-Utilities only)	30 day public comment period if there will be an inter-basin water transfer. (An inter-basin transfer is when water is withdrawn from one stream system and then discharged into a different stream system)	No public hearings

Kentucky Department for Environmental Protection
300 Fair Oaks Lane
Frankfort, KY 40601
502-564-2150
502-564-4245 (fax)
www.dep.ky.gov/

Solar Energy: Frequently Asked Questions



Who is National Grid Renewables?

farmer-friendly

adjective: exhibiting a respect and appreciation for hardworking farmers, their communities, and the rural American way of life.

We know that nobody knows the land better than our landowner partners and tenants – which is why we retain open lines of communication with each of our land partners throughout the project lifecycle and compensate our land partners fairly.

We are farmer-friendly and community-driven. National Grid Renewables was founded with deep roots in agriculture and an understanding and respect for agriculture, farmers, and their local communities.

National Grid Renewables, which includes the renewables development company formerly known as Geronimo Energy, is a leading North American renewable energy company based in Minneapolis, Minnesota, with satellite offices located throughout multiple states in the regions where it develops, constructs, and operates. As a farmer-friendly and community focused company, National Grid Renewables develops projects for corporations and utilities that seek to repower America’s electricity grid by reigniting local economies and reinvesting in a sustainable future. National Grid Renewables is part of the competitive, unregulated Ventures division of National Grid and has a robust portfolio of solar, wind, and energy storage projects located throughout the United States in various stages of development, construction and operation.

National Grid Renewables is excited to partner with our landowners to bring millions of dollars into their local economy via renewable energy development. We promise prompt responsiveness and diplomacy at all times, as well as a willingness to answer questions from supporters and objectors alike.

We look to hire from the existing local work force near our projects.



We work closely with our landowners and their neighbors during the siting process to ensure that our projects are well-received by the community to yield sustaining support for the long term operation of a project.



Solar Energy Basics

Photovoltaic Solar Panels

Photovoltaic (PV) solar panels are designed to absorb as much incoming sunlight as possible. As light passes through the front surface of a solar panel, it is trapped in the panel's solar cells and converted to electricity. The most common solar panels available today are polycrystalline, thin film and monocrystalline.

Tracking Technology Maximizes Electric Output

While each site warrants its own unique design, the increase in the use of tracking solar panels has resulted in maximum solar resource for many of National Grid Renewables' projects. Tracking solar racking systems have unique technology that allows the panel to track the sun as it travels across the sky throughout the day. This allows for maximum solar energy absorption, extended sunlight capture in the mornings and evenings and greater electrical output during peak demand.

Fixed Tilt Technology

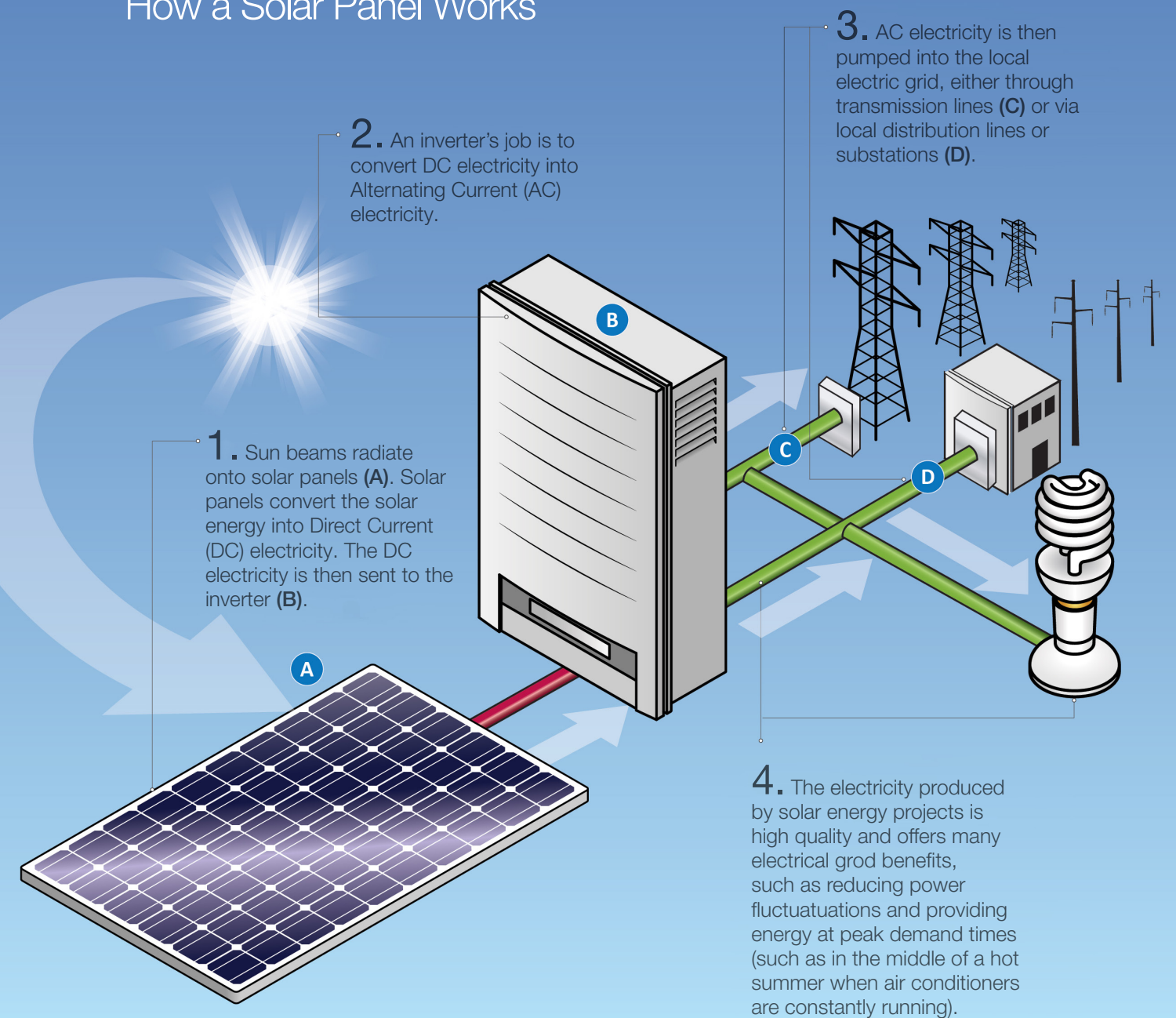
Fixed tilt racking systems are the most abundant type of racking system in the US. They typically face south to maximize the sun's rays throughout

the year. The advantages of fixed tilt racking are their ability to withstand greater topographical grades and that they can be a more economic choice over tracking systems.

Solar Energy Projects Are Reliable

Did you know that no power plant is 100% reliable? Back-ups are needed for every type of energy producer. A modern solar panel produces electricity 100% of the time the sun is shining, but generates different energy outputs depending upon the solar strength and other factors. Over the course of a year, a solar panel can be expected to generate approximately 20% of its maximum output, which is known as the "net capacity factor."

How a Solar Panel Works



Solar Energy Facts

National Grid Renewables' farmer-friendly approach ensures that each of our projects will benefit the local area for generations to come.

Responsible Planning and Siting

National Grid Renewables works hard to ensure our solar facilities are built to the highest of standards. When considering locations for our solar sites, we consider: the projected size of the facility, land type and quality, localized environmental impacts, the local climate and (if necessary) snow load, the host community's receptiveness to renewable energy, the electric service territory ownership, the proximity of the site to nearby existing electrical infrastructure, and permitting and interconnection considerations, among other factors.

National Grid Renewables has experience in acquiring hundreds of thousands of acres for renewable energy projects and works diligently to identify the best land through local jurisdictions, permitting authorities, and landowner interest. National Grid Renewables' farmer-friendly approach ensures that each of our projects will benefit the local area for generations to come. National Grid Renewables is committed to providing each of its landowners with prompt responsiveness, expert advice and fair

compensation. We work closely with landowners and neighbors during the siting process to ensure that projects are well received by the community and yield sustaining support for the long term operation of the project.

Advanced Solar Technology Keeps You Safe

Solar arrays not only produce clean energy for current electricity demand, but also provide clean energy for future generations. While stray voltage can be an issue with traditional electric generation sources for farmers with livestock, solar facilities that are built correctly will not produce stray voltage. All National Grid Renewables solar facilities are built to electric code and are thoroughly reviewed for any possible electrical impacts on the surrounding community. When siting and designing a project, stray voltage is addressed through various methods, including soil studies. Soil studies are conducted to determine the corrosive nature and thermal capacity of the earth. This helps ensure that all grounding equipment and buried cable are designed correctly and no stray issues arise from corroded grounding equipment.

Electromagnetic Field (EMF)

The term electromagnetic field (EMF) refers to electric and magnetic fields that are present around any electrical device. Electric fields arise from voltage or electrical charges, and magnetic fields arise from the flow of electricity or current that travels along transmission lines, power collection lines, substation transformers, house wiring, and electrical appliances. The intensity of an electric field is related to the voltage of the line, and the intensity of a magnetic field is related to the current flow through the conductors (wire). EMF can occur indoors and outdoors. In fact, all power lines produce EMF, including those that connect your home to the electrical grid.

While the general consensus is that electric fields pose no risk to humans, the question of whether or not exposure to magnetic fields potentially causes biological responses or even health effects continues to be the subject of research and debate. For a solar project, the sources of EMF are from electrical collection lines that will likely be buried underground and from the transformers installed at each inverter

pad. EMF from underground electrical collection lines dissipates right next to the lines because they are installed below ground inside insulated shielding. A solar facility has to comply with the National Electric Code, which ensures proper installation, safety procedures, and equipment specifications for all of the electrical components utilized in the array. As a result, National Grid Renewables does not anticipate any issues to arise regarding EMF.

Reflection and Glare

The glass surface of modern solar panels can include an anti-reflective coating, similar to that used on optical equipment (camera lenses), as well as texturing to minimize any loss of incoming light. Studies have shown that PV solar panels reflect as little as 2% of incoming light, which means that PV solar panels are less reflective than water or window glass.

In the past, solar panel glare had primarily been a concern only for the aviation industry. However, recent studies have proved that solar panels pose minimal concern to pilots. In fact, there are numerous solar panel

installations near U.S. airports, and there has never been a documented case of an accident due to solar panel glare. Hindawi Publishing Corporation, in conjunction with International Scholarly Research Notices, conducted an experiment that measured the potential glare that an aircraft pilot could experience as a result of ground-mount solar panels. Their findings concluded that "the potential for hazardous glare from flat-plate PV systems is similar to that of smooth water and not expected to be a hazard to air navigation."

By working with expert construction and technology partners, National Grid Renewables is able to model facility locations and solar panel arrays with no reflective glare issues or safety concerns. National Grid Renewables develops each solar site with the approved Federal Aviation Administration (FAA) and Sandia Labs solar glare hazard analysis tool, which identifies and mitigates solar glint and glare.

Protecting the earth, environment and its inhabitants is at the heart of why we do what we do: solar energy is one of the least harmful types of energy production.

Soil studies are conducted to determine the corrosive nature and thermal capacity of the earth.

The glass surface of modern solar panels can include an anti-reflective coating, similar to that used on optical equipment (camera lenses), as well as texturing to minimize any loss of incoming light.

National Grid Renewables is committed to providing each of its landowners with prompt responsiveness, expert advice and fair compensation.

Solar Energy and the Environment

Diligent Development

Protecting the earth, environment and its inhabitants is at the heart of why we do what we do: solar energy is one of the least harmful types of energy production. The solar energy industry as a whole off-sets billions of tons of carbon dioxide emissions, consumes little to no water, and uses a naturally occurring and replenishing fuel source. Our business is the business of environmental stewardship, and National Grid Renewables will continue to take every step to ensure that we conduct business in the most environmentally responsible way possible.

Solar is a Good Neighbor

Solar projects are a relatively low impact development option for communities. They are low to the ground (approximately 10-15 feet above grade), are pollutant free, virtually noiseless, improve water quality, reduce runoff and do not create any odors or undesirable impacts.

Solar Projects Are Free Of Pollutants

Solar projects do not generate air or water emissions, produce any hazardous waste, deplete natural resources, cause environmental damage through resource extraction and transportation, or require significant amounts of water during operation. Solar power's pollutant-free electricity helps offset the environmental damage caused by other forms of power generation.

Wildlife Advocates

Prior to constructing a solar project, National Grid Renewables conducts local wildlife studies to ensure that each project is developed in the most environmentally-friendly way. Factors such as animal breeding areas and wildlife corridors are all considered when choosing a location for a solar project. Maintenance plans for the solar facility also take into consideration wildlife that may live within the fence. National Grid Renewables also follows DNR siting and seed mix guidance for solar arrays.

National Grid Renewables often develops a habitat conservation plan for our solar projects. After a solar project is constructed, areas that do not contain permanent project facilities will be revegetated with a low growing seed mix developed specifically for

each site to ensure establishment, create a stable habitat, and promote biodiversity. In this way, National Grid Renewables' solar projects not only protect the environment by reducing carbon dioxide emissions and water usage, but they also help provide a safe harbor for vital ecosystem species. The creation of a stable habitat also helps reduce runoff and can improve water quality, two important topics for rural communities.

Protecting the environment

The solar energy industry as a whole off-sets billions of tons of carbon dioxide emissions, uses little to no water consumption, and uses a naturally occurring and replenishing fuel source.

After a solar project is constructed, areas that do not contain permanent project facilities will be revegetated with a low growing seed mix developed specifically for each site to ensure establishment, create a stable habitat, and promote biodiversity.

Prior to constructing a solar project, National Grid Renewables conducts local wildlife studies to ensure that each project is developed in the most environmentally-friendly way.

Solar power's pollutant-free electricity helps offset the environmental damage caused by other forms of power generation.

Solar projects are low to the ground (approximately 10-12 feet above grade), are pollutant free, virtually noiseless, improve water quality, reduce runoff and do not create any odors or undesirable impacts.



The Economics of Solar Energy

Unlike fossil fuels, whose costs fluctuate with the market, solar energy does not rely upon market-dependent fuel costs. Such stability means there is a possibility of locking in solar energy pricing for the life of the project.

The Strong Market for Solar Energy

The solar industry has experienced exceptional growth, driven primarily by dramatic reductions in the installation cost. These price decreases have made solar energy cost competitive with traditional energy sources and is now one of the least expensive renewable energy resource available in many areas of the United States today.

Additionally, solar energy is a peaking resource, which means that in general, solar's peak energy supply occurs when it's needed most. For example, on hot sunny, summer days when everyone turns on their air conditioning, solar projects are operating at their highest capacity and can best support the increased demand for electricity.

Solar Energy is a Stable Investment

Unlike fossil fuels, whose costs fluctuate with the market, solar energy does not rely upon market-dependent fuel costs. Such stability means there is a possibility of locking in solar energy pricing for the life of the project. Furthermore, because of the recent significant technological advancements, solar energy has seen a steady decrease in its cost to produce energy, so today's fixed price is significantly less than the fixed prices of years past.

Solar Projects are Popular and Lucrative for Farmers

Solar projects are popular with farmers because solar projects provide an additional revenue source for their family. National Grid Renewables calls this supplemental revenue "Extraordinary Seed Crop".

Extraordinary Seed Crop is guaranteed revenue provided by hosting a National Grid Renewables solar project. In uncertain times, our operating solar projects provide farmers and landowners with income certainty. As we all know, the commodity markets fluctuate up and down and are unpredictable. Solar energy provides income certainty, diversified revenue streams, and decreased risk. No other "seed crop" can promise that kind of certainty.

Solar Energy Brings Substantial Money to Local Communities

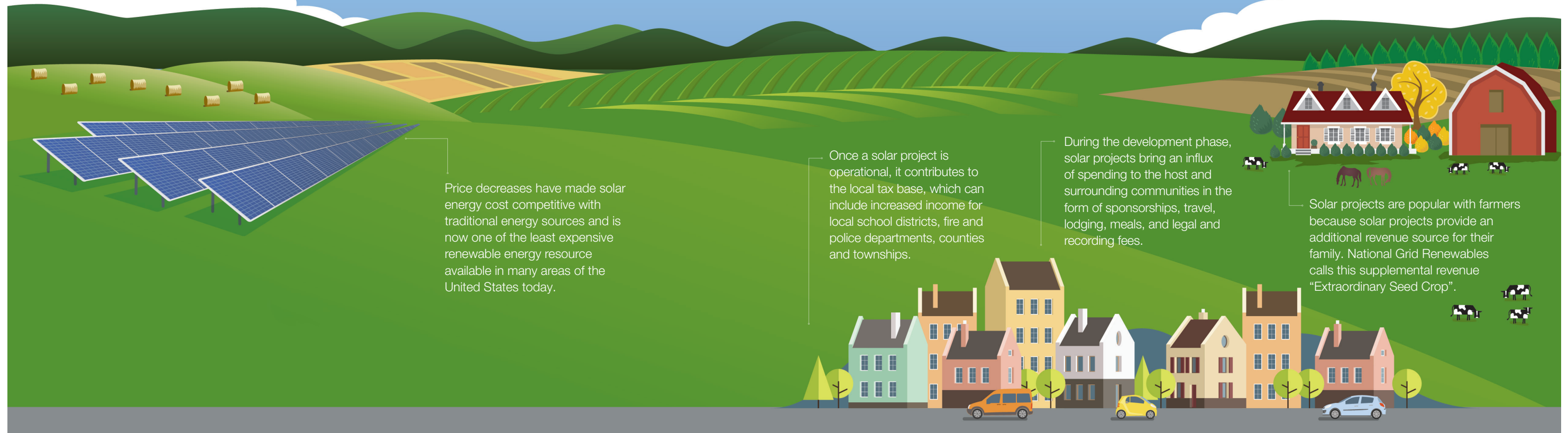
Solar projects bring significant economic benefit to their host communities throughout the development, construction and operation phases. During the development phase, solar projects bring an influx of spending to the host and surrounding communities in the form of sponsorships, travel,

lodging, meals, and legal and recording fees. Throughout development, National Grid Renewables may bring construction companies, power purchasers and other solar industry constituents into the local area to survey the project location, which puts money back into the community's pocket via restaurants, gas stations, hotels and retail shops.

During the construction phase, solar project communities experience another boom in all of the above mentioned spending categories, but this time, multiplied by the dozens. Solar projects cause an influx of new construction jobs in the local area, which means even more revenue for local shops, restaurants and hotels, plus a boost to the local economy in the form of increased resident income.

Once a solar project is operational, it contributes to the local tax base,

which can include increased income for local school districts, fire and police departments, counties and townships. These additional revenue streams afford communities the ability to build and improve schools, roads, bridges and other infrastructure items.



Price decreases have made solar energy cost competitive with traditional energy sources and is now one of the least expensive renewable energy resource available in many areas of the United States today.

Once a solar project is operational, it contributes to the local tax base, which can include increased income for local school districts, fire and police departments, counties and townships.

During the development phase, solar projects bring an influx of spending to the host and surrounding communities in the form of sponsorships, travel, lodging, meals, and legal and recording fees.

Solar projects are popular with farmers because solar projects provide an additional revenue source for their family. National Grid Renewables calls this supplemental revenue "Extraordinary Seed Crop".

The Life of a Solar Project

Construction of a Solar Project

Construction of larger solar projects (100+ MW) typically takes eight months from commencement of construction to commercial operation. Smaller projects (less than 100 MW) typically take up to 6 months to reach commercial operation. As you can imagine, a lot goes into the construction of a solar project, but the process always includes: civil preparation (including clearing and grubbing of the property), fence installation, structural work such as the installation of steel piers and the racking system on which the modules sit, electrical cable installation and trenching, and module and inverter installation. After equipment installation is complete, the property will be seeded

into a stable low growing seed mix. Testing and commissioning are the final stages of construction, which include utility testing to ensure safe and effective delivery of electricity to the grid.

After construction, property that has been disturbed will be restored. Landowners will be compensated for crop damages incurred during development and construction. National Grid Renewables' agreements provide many protections for landowners to ensure that they don't incur costs or risks during development and construction.

Drain Tile

In addition to crop damage payments, it is part of National Grid Renewables' core development philosophy to consider drain tile when designing solar projects. For every solar project

we develop, we analyze the location of existing drain tile and try our best to design project layouts around it. If for some reason, we are unable to design around drain tile, we take great care when cutting into the tile in order to minimize impacts. Just like our crop damage clause, National Grid Renewables offers drain tile damage payments, which ensures that drain tile is restored to its original state after project construction is complete.

Solar Project Layout Design

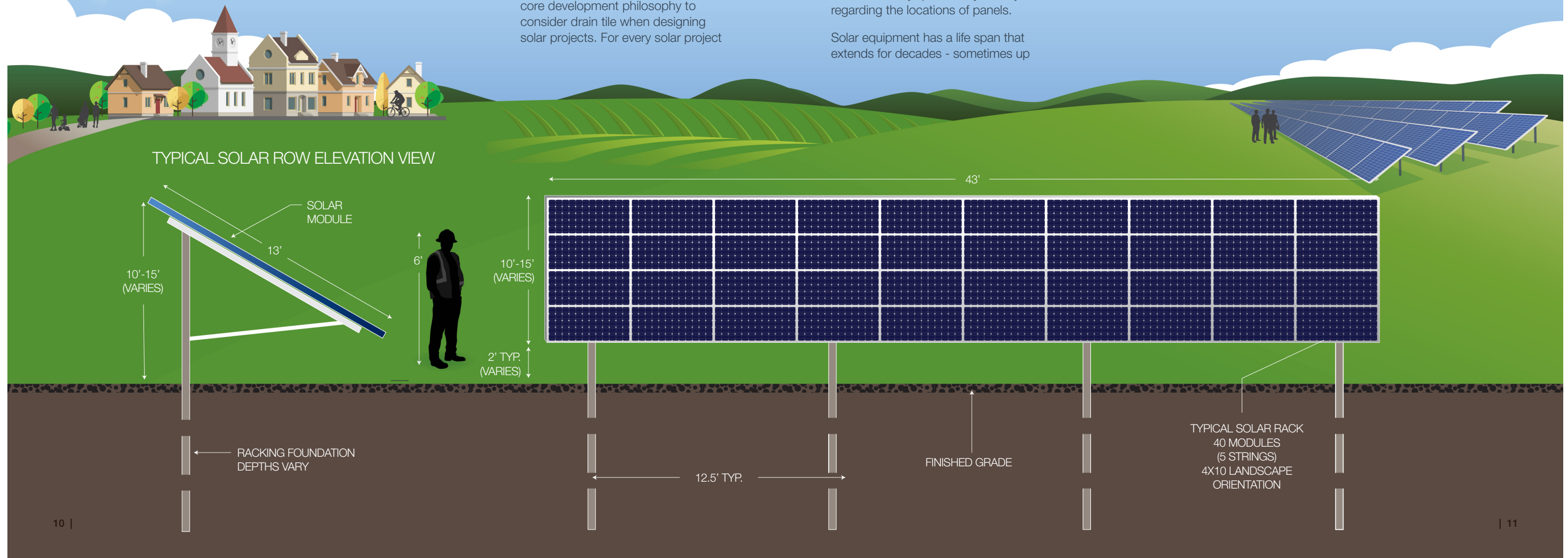
Throughout the development process, National Grid Renewables will remain open and honest – we will work with you to make sure you are comfortable with the proposed project layout and will answer any questions you may have regarding the locations of panels.

Solar equipment has a life span that extends for decades - sometimes up

to 50 years. Modules will continue to produce electricity well past their warranties. At the end of the life of the project, solar equipment can be removed, recycled and salvaged for additional value. Because solar energy projects are considered low impact development, solar projects allow for flexibility in regards to the land use of after its removal. Some solar project lands are even returned to their original agricultural use.

If at any time during the life of the project new module technology would be further boost the economics of the project, the project may be repowered with new modules.

Solar equipment has a life span that extends for decades - sometimes up to 50 years. Modules will continue to produce electricity well past their warranties.



What Does a Solar Project Look Like?



Racking



Fixed Panels



Tracking Panels



Inverters



Communications and
Technical Equipment



Fencing

www.nationalgridrenewables.com

We would love to show you around!

If you are interested in visiting one of our operating solar projects, or to learn more about National Grid Renewables, visit any one of our office locations or call us at 952.988.9000. You can also email your questions and comments to info@nationalgridrenewables.com, or visit us on the web at www.nationalgridrenewables.com.

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EXHIBIT D

COMPLIANCE WITH LOCAL ORDINANCES, REGULATIONS, AND SETBACK REQUIREMENTS

Requirement

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).

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 (10 MW) 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

The Caldwell Solar Facility (Project) will be sited in Caldwell County. Caldwell County does not have a planning and zoning commission with jurisdiction over the site.

Caldwell County does not have a planning and zoning commission with jurisdiction over the Project. The Project is thus subject to the setbacks defined in KRS 278.706(2)(e) and KRS 278.704(2). The Project is not proposed to be located on the site of a former coal processing plant, and it will not use any waste coal as a fuel source. The Project site will not have any existing electricity generating facilities onsite. The Project will not include any exhaust stacks or wind turbines. Therefore, the setback requirement of 1,000 feet from the property line of adjacent properties does not apply. Pursuant to KRS 278.706(2)(e), all proposed structures or facilities used for generation of electricity must be two thousand (2,000) feet from any residential neighborhood, school, hospital, or nursing home facility.

As shown on Exhibit I, Figure 1, there are no schools, hospitals, or nursing home facilities within 2,000 feet of any proposed structure or facility used for electricity generation. There are two clusters of residences within 2,000 feet of the Project area: both adjacent to the northcentral boundary of the Project; that could meet the criteria of a “residential neighborhood” as defined in KRS 278.700(6). Some generation facilities and structures are proposed within 2,000 feet of these two residential communities. Caldwell will file a request, separate from this application, for any deviation needed from the 2,000-foot setback requirement.

In the preliminary layout, the nearest peripheral residences are at least 200 feet away from generation structures, including panels and inverters.

A statement of compliance as required by the statute is provided as an attachment to this exhibit.

**KENTUCKY STATE BOARD ON ELECTRIC
GENERATION AND TRANSMISSION SITING**

**CALDWELL SOLAR, LLC
CASE NO. 2020-00244**

**Statement of Certification
(KRS 278.706(2)(d))**

Comes the Affiant, Nathan Franzen, and after first being duly sworn, hereby states as follows:

1. I am over the age of 18 and have personal knowledge of the information contained herein, and have further conducted an inquiry into the facts contained in this Statement and have found them to be true to best of my knowledge; and,
2. I am the Vice President, Development of National Grid Renewables, the direct parent company of of Caldwell Solar, LLC; and,
3. I have overseen the proposed facility project, the subject of this Application in Case No. 2020-00244, by reviewing the proposed plan and design for the project; and,
4. I hereby certify that proposed plant will be in compliance with all local ordinances and regulations concerning noise control and with any local planning and zoning ordinances.
5. There is no planning and zoning commission with jurisdiction over the site located in Caldwell County.

Further Affiant sayeth naught.

Nathan Franzen
Nathan Franzen., Affiant

STATE OF MINNESOTA)
)
COUNTY OF HENNEPIN)

Subscribed, acknowledged and sworn to before me by Nathan Franzen on this the 28th
day of September 2021.

Danielle M DeBlieck
NOTARY PUBLIC, STATE AT LARGE



My Commission Expires: Jan. 31, 2023

EXHIBIT E

EFFECT ON KENTUCKY ELECTRICITY TRANSMISSION SYSTEM

Requirement

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

Compliance

Caldwell Solar, LLC (Caldwell) is sited within the Midcontinent Independent System Operator's (MISO) Central Zone 6. The Caldwell Solar Facility (Project) is currently part of the MISO-Central-DPP-2020-Cycle and was assigned Queue Number J1632 (DPP stands for Definitive Planning Phase). MISO began DPP Phase 1 in March 2021, with Phase 1 study results projected to be complete in December 2021. DPP Phase 2 is scheduled to be complete in February 2022, and DPP Phase 3 is scheduled to be complete in July 2022. At the completion of DPP Phase 3, MISO will issue a Final System Impact Study and Network Facilities Study. These studies will provide the information necessary to meet this requirement by determining the potential impacts to the regional electric grid and identifying the need for any network upgrades to mitigate potential impacts.

Exhibit F: Caldwell Solar Facility Economic Impact Analysis

Kentucky State Board on Electric
Generation and Transmission
Application

Case No. 2020-00244



Table of Contents

1	Overview and Context	3
2	Capital Investment	4
3	Methodology for Quantifying Economic Impacts	5
4	Economic Impacts: Statewide	6
5	Economic Impacts: Regional	7
6	Government Revenue Impacts	8
7	Additional Investments in Community and Ancillary Benefits	9
8	Summary	10
9	References	11

Tables

Table 1	Socioeconomic Metrics for National and SAOI Populations	3
Table 2	Estimated Economic Impacts: Statewide SAOI	6
Table 3	Estimated Economic Impacts: Regional SAOI	7

Acronyms

Applicant	Caldwell Solar, LLC
GDP	Gross Domestic Product
JEDI	Jobs and Economic Development Impact
Project	Unbridled Solar Facility
SAOI	Socioeconomic Area of Interest
Caldwell	Unbridled Solar, LLC

1 Overview and Context

Caldwell Solar, LLC (Caldwell, or the Applicant), a wholly owned subsidiary of National Grid Renewables Development, LLC, is proposing the Caldwell Solar Facility (the Project) which will be an up to 200-megawatt (MW) alternating current (AC) (260-MW direct current [DC]) photovoltaic electricity generation facility. The Project is associated with high levels of both upfront and ongoing capital investment to construct and maintain the facility. These investments will generate positive economic and fiscal impacts in the socioeconomic areas of interest (SAOIs): The State SAOI and the Regional SAOI. The Regional SAOI is defined as the combined areas of Caldwell County, Crittenden County, and Lyon County (all in Kentucky). For both SAOIs, positive impacts arise both from short-term effects during the construction phase and from long-term annual impacts during the operational phase.

Initial construction related impacts include the creation of hundreds of construction jobs, meaningful increases in annual tax revenues, and increased economic activity more generally in adjacent businesses among other positive impacts. Operational phase impacts include: the creation of a smaller set of ongoing jobs; a meaningful contribution to the local tax base, primarily through property taxes; the long-term presence of a responsible corporate citizen with a commitment to the regional economy through charitable giving to local schools; and the provision of green, renewable electricity, which is potentially attractive to many businesses in their siting locations.

The Project would be located in a predominantly rural county with per capita income levels below that of Kentucky and the nation. In addition, this county is associated with poverty levels that are equal to or exceed the statewide average and exceed the national average. See Table 1 for a comparison of the SAOIs against national values for select socioeconomic metrics.

Table 1 Socioeconomic Metrics for National and SAOI Populations

	Population (2019) ^a	Population per sq. mile, (2010) ^a	Per capita income (2015-2018) ^a	Population in poverty ^a (2019)	Gross Domestic Product (GDP) for year 2018 ('000s) ^b
USA	328,239,523	87	\$34,103	10.5%	\$19,091,662,000
Kentucky	4,467,673	110	\$28,178	16.3%	\$187,215,545
Caldwell County, KY	12,747	38	\$28,799	15.8%	\$380,279
Crittenden County, KY	8,806	26	\$23,959	19.2%	\$198,963
Lyon County, KY	8,210	39	\$26,994	14.5%	\$193,352

^a US Census Bureau (2020)

^b US Bureau of Economic Analysis (2020)

2 Capital Investment

Total Project spending during construction is estimated to be in the hundreds of millions of dollars. A meaningful proportion of this spending, and employment will occur within the SAOs. Project-related spending on materials and wages suffuses new money into the state and regional economies. Each dollar invested will lead to a more than one-for-one benefit as money circulates throughout different sectors of the economy. This “multiplier effect” magnifies the positive economic impacts of Project construction and operation. In addition, the capital investments associated with this Project are poised to have outsized positive impacts relative to more developed and economically advantaged areas. In other words, a given amount of investment will provide a relatively larger stimulus in a smaller local economy than the same investment in a larger economy.

3 Methodology for Quantifying Economic Impacts

In order to quantify economic impacts within the SAOIs, the Applicant conducted an analysis using the solar-power specific version of the Jobs and Economic Development Impact (JEDI) tool. The JEDI tool, developed by National Renewable Energy Laboratory (NREL), is a widely used and recognized model for determining economic impacts of various utility scale power generation projects. The results below are based on a 200-MW facility.

The JEDI model estimates results natively at the state level. Therefore, economic impacts from the State SAOI reported here are those outputs estimated by the JEDI model. Economic impacts for the Regional SAOI are determined through a scaling approach by adjusting State SAOI results downward by the ratio of their respective 2019 Gross Domestic Products (GDPs). The combined 2019 GDP of the Regional SAOI was divided by the 2019 GDP of Kentucky. The resulting scaling factor is determined to be 0.0041, or 0.41%¹. Therefore, economic impacts reported for the Regional SAOI are equal to the State SAOI estimates multiplied by 0.0041².

¹ When this scaling is based upon population rather than GDP, a somewhat higher value of 0.0067, or 0.67%, is derived.

² There are reasons this approach may yield underestimates of local impacts because, local purchases and local hires are generally more favorable from a logistical perspective, all else equal. For example, local purchases and hires are associated with reduced transportation time and cost. On the other hand, there are reasons this approach may yield overestimates of local impacts because the rural, economically modest, and economically undiversified characteristics of the regional economy make purchases and hires of specialized equipment and labor may be available only in limited quantities or not at all. Whether the estimates presented here, on net, are over- or under-estimates of the true values depends on the relative importance of these factors among others. For the purpose of this analysis, we assume the forces pushing toward overestimates and the forces pushing toward underestimates are equal in magnitude and cancel each other out.

4 Economic Impacts: Statewide

Statewide economic impacts of the construction phase are estimated to create approximately 161 direct jobs filled by skilled and contract workers from within Kentucky, as displayed in Table 2. Another 200 jobs in Kentucky will be supported through indirect and induced impacts of Project construction. In total, these 361 jobs represent an estimated \$21.9M in new wages into the statewide economy, which are expected to drive an additional \$25.3M in increased economic activity. The total construction phase economic impact of the Project (exclusive of additional tax revenues) is estimated to be approximately \$47.1M.

Economic impacts of the operation phase are anticipated to create approximately five direct jobs³ for the duration of operations, as displayed in Table 2. Another five jobs in Kentucky will be supported through indirect and induced impacts of Project operations. In total, these 10 jobs represent an estimated \$0.6M in new annual wages, which will drive increased economic activity of an additional \$0.7M. The total operational phase economic impact of the Project is estimated to be approximately \$1.3M annually.

Table 2 Estimated Economic Impacts: Statewide SAOI

	Construction Phase			Operational Phase (Annual)		
	Number of Jobs	Value of Earnings (000s)	Total Economic Output (000s)	Number of Jobs	Value of Earnings (000s)	Total Economic Output (000s)
Direct	160.6	\$11,137.4	\$17,524.0	5.0	\$300.8	\$300.8
Indirect & Induced	200.4	\$10,735.2	\$29,600.8	5.3	\$329.1	\$1,003.5
Total	261	\$21,872.6	\$47,124.8	10.3	\$629.9	\$1,304.2

Note: May not sum to "total" due to independent rounding.

³ An estimate of anticipated direct employment for the operational phase of this Project was revised based on Applicant's recent experience from similar projects. Estimates of direct employment wages, induced economic impacts and total economic impacts for the operational phase have been updated to account for revised estimates of direct employment during operations.

5 Economic Impacts: Regional

Regional economic impacts of the construction phase are estimated to create approximately one direct job filled by a craft/contract worker from the Regional SAOI, as displayed in Table 3. Another approximately one job will be supported through indirect and induced impacts of Project construction. In total, these approximately two jobs represent an estimated \$0.1M in new wages into the regional economy annually, which will drive increased economic activity of an additional \$0.1M annually through Indirect and Induced impacts. The total construction phase economic impact of the Project is estimated to be approximately \$0.2M annually.

Economic impacts of the operation phase in the regional SAOI will be relatively modest as shown in Table 3. These estimates, which are scaled down from statewide impacts, likely underestimate regional impacts, because the five long-term direct jobs during operation are likely to be preferentially filled by individuals who live nearby (or will move nearby) the Project.

Table 3 Estimated Economic Impacts: Regional SAOI

	Construction Phase			Operational Phase (Annual)		
	Number of Jobs	Value of Earnings (000s)	Total Economic Output (000s)	Number of Jobs	Value of Earnings (000s)	Total Economic Output (000s)
Direct	0.7	46.0	72.3	0.0	\$1.24	\$1.24
Indirect & Induced	0.8	44.3	122.2	0.0	\$1.36	\$4.14
Total	1.5	90.3	194.5	0.0	\$2.6	\$5.38

Notes: Values in this table are scaled from the statewide values by applying an adjustment factor of 0.0134. May not sum to "total" due to independent rounding.

6 Government Revenue Impacts

This Project will have a positive tax impact on governments within the SAOIs. The Project will pay new state sales tax as well as property taxes over the life of the project, which will support local schools, infrastructure, and other services. These new taxes are especially valuable because solar energy projects require limited community services such as schools, roads, water, or sewer relative to the taxes they generate.

- During construction, millions of dollars worth of material will be purchased in Kentucky. However, because many of the construction related purchases will be tax exempt under Kentucky law, these purchases will generate limited Kentucky sales tax revenue.
- During the 20-year operational period, \$240,000 in annual tax revenue associated with state and local taxes will be paid. This will total an estimated \$4.8M in state and local taxes over the life of the project.
- The Applicant is committed to providing approximately \$800,000 to a local charitable fund over twenty years.

7 Additional Investments in Community and Ancillary Benefits

In addition to increased economic activity and tax payments, this Project will make an important contribution to the diversification of the economy in the SAOIs, particularly at the regional level. This Project is poised to assist Kentucky and the Regional SAOI to accelerate renewable energy job and spending growth, benefitting state and regional citizens.

Finally, many large businesses are considering availability and proximity to renewable electricity resources when making siting decisions. Corporate commitments to renewable electricity support local jobs and allow corporations to leverage positive marketing opportunities to enhance brand image and recruiting effort. A more attractive business setting, in turn, may provide myriad additional positive economic impacts to the state and region.

8 Summary

The construction and operation of the Project would have a positive economic impact on the SAOIs including increases in employment and income, elevated tax revenues, and a variety of other ancillary benefits. The total economic impact for Kentucky is estimated at approximately \$47.1M during construction and approximately \$1.3M annually during operation. The total economic impact for the Regional SAOI is estimated at approximately \$0.5M during construction and less than \$0.1M⁴ annually during operation. Detailed economic impacts are provided in Table 2 and Table 3. Government tax revenues paid by the applicant estimated to exceed \$14M over the life of the project are also noteworthy and are described in Section 6. Cumulatively, these positive economic impacts are likely to have outsized beneficial effects due to the Project's proposed location in the relatively rural and economically undiversified setting of the Regional SAOI.

⁴ As described in Section 3 (Methodology) economic estimates for the Regional SAOI are estimated by scaling down statewide impacts by a factor determined by the relative GDP of Caldwell, Crittenden, and Lyon counties to the GDP of Kentucky. For operational phase impacts in particular, this scaling methodology is likely to yield an estimate that under-predicts actual economic impacts.

9 References

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About Cardno

Cardno is an ASX-200 professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno's team includes leading professionals who plan, design, manage, and deliver sustainable projects and community programs. Cardno is an international company listed on the Australian Securities Exchange [ASX:CDD].

Cardno Zero Harm

Cardno
**ZERO
HARM**
EVERY JOB. EVERY DAY.

At Cardno, our primary concern is to develop and maintain safe and healthy conditions for anyone involved at our project worksites. We require full compliance with our Health and Safety Policy Manual and established work procedures and expect the same protocol from our subcontractors. We are committed to achieving our Zero Harm goal by continually improving our safety systems, education, and vigilance at the workplace and in the field.

Safety is a Cardno core value and through strong leadership and active employee participation, we seek to implement and reinforce these leading actions on every job, every day.

EXHIBIT G ENVIRONMENTAL PERMITS

Requirement

KRS 278.704(1): The certificate shall be conditioned upon the applicant obtaining necessary air, water and waste permits.

KRS 224.10-280 Cumulative environmental assessment and fee required before construction of facility for generating electricity

Compliance

All necessary air, water, and waste permits have been or will be obtained before construction and operation of the Project, and may include:

Permit	Regulatory Agency	Activity	Authority
Kentucky Pollutant Discharge Elimination System (KPDES) Individual Permit	Kentucky Division of Water (DOW)	Discharge of process wastewater, non-process wastewater or stormwater from a point source.	KRS 224.10-100, 224.16-050, 224.70-110, 224.70-120, 401 KAR 5:001, and 401 KAR 5:055–5:080
KPDES Construction Storm Water Discharge General Permit	DOW	Stormwater discharges from construction activities that disturb one or more acres.	KRS 224.16-050, 224.16-060, 401 KAR 5:055 and 5:060
KPDES Wastewater Facility Construction Permit	DOW	If installation of sewers or pump stations is involved, a Wastewater Facility Construction Permit is required.	KRS 224.10-100, 224.16-050, 224.70-110, and 401 KAR 5:005
General Permit for Floodplain Development	DOW, Caldwell County	Development in, along, or across a stream requires a floodplain permit.	KRS 151.230
Water Withdrawal Permit	DOW	Withdrawal of public water.	KRS 151.140, 401 KAR 4:010 and 4:200
Section 404 Clean Water Act Permit / Section 10 Rivers and Harbors Act Permit (Individual)	U.S. Army Corps of Engineers	Permit for structures and/or work in or affecting navigable Waters of the United States.	33 CFR 322.3
Section 401 Water Quality Certification	DOW	Any discharge into waters of the Commonwealth. associated with any federally licensed or permitted activity.	§ 401 CWA KRS 224.16-050 401 KAR Ch. 5

A Cumulative Environmental Assessment, as required pursuant to KRS 224.10-280 is provided as an attachment following this exhibit. The report includes an environmental assessment of potential air, water, and waste impacts from construction and operation of the Caldwell Solar Facility. Caldwell is filing the Cumulative Environmental Assessment with the Kentucky Energy and Environment Cabinet concurrently with this application.

Caldwell Solar Facility
Cumulative Environmental Assessment
Kentucky State Board on Electric Generation and
Transmission Application

Case No. 2020-00244



Table of Contents

Introduction	2
1 Air Pollutants	3
2 Water Pollutants	4
2.1 Surface water	4
2.2 Groundwater	5
3 Waste	6
4 Water Withdrawal	7
5 References	8

Acronyms

Applicant	Caldwell Solar, LLC
BMP	Best Management Practice
CEA	Cumulative Environmental Assessment
CO	Carbon Monoxide
Kentucky DOW	Kentucky Energy & Environment Cabinet, Department for Environmental Protection, Division of Water
NAAQS	National Ambient Air Quality Standards
NO ₂	Nitrogen Oxide
O&M	Operations and Maintenance
Pb	Lead
PM	Particulate Matter
Project	Caldwell Solar Facility
PV	Photovoltaic
SO ₂	Sulfur Dioxide
Caldwell	Caldwell Solar, LLC
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey

Introduction

Section KRS 224.10-280 of the Kentucky statutes for the Energy and Environment Cabinet states that an electrical facility may not be constructed until the developing party submits a cumulative environmental assessment (CEA) to the Kentucky Energy and Environment Cabinet as part of its application documents.

In compliance with KRS 224.10-280, this cumulative environmental assessment discusses potential impacts and impact mitigation plans for the following categories:

1. Air Pollutants
2. Water Pollutants
3. Waste
4. Water Withdrawal

1 Air Pollutants

In accordance with the Clean Air Act, the United States Environmental Protection Agency (EPA) developed National Ambient Air Quality Standards (NAAQS). The NAAQS were set to regulate air pollutants that are deemed harmful to public health and the environment. Maximum allowed concentrations and safety margins were established for six principal pollutants, referred to as “criteria” pollutants: ozone, particulate matter (PM), carbon monoxide (CO), nitrogen oxide (NO₂), sulfur dioxide (SO₂), and lead (Pb).

Based on daily measurements of regional air quality, areas that fall below the NAAQS threshold are designated as attainment areas. Regions that exceed the NAAQS are deemed nonattainment areas. When a nonattainment area improves in air quality and meets the NAAQS, it becomes a maintenance area.

The Caldwell Solar Facility (Project) proposed by Caldwell Solar, LLC (Caldwell) will be located in Caldwell County (Figure 1), which is within an air quality control region in attainment of NAAQS (EPA 2021). The state of Kentucky implements further air quality protection through the Kentucky Administrative Regulations (KAR), Title 401, chapters 50 through 68.

Air quality impacts from construction would occur during daylight hours over the 12-18-month construction period. An estimated up to 300 construction workers are anticipated to be onsite at a time, using equipment and machinery which may include bulldozers, backhoes, flatbed semi-trucks, forklifts, tractors, bobcats, augers, pile drivers, and concrete trucks.

Construction and operation of the completed facility would produce air pollutants. Emissions will predominantly come from the construction and personnel vehicles, operating equipment, and supplies. Vehicles and equipment with internal combustion engines would produce PM, NO₂, CO₂, SO₂, and volatile organic compounds (VOCs). The anticipated emissions generated by construction are expected to be minor due to the scale and duration of operations. Estimating the precise quantity of emissions produced by heavy machinery will require factoring in engine horsepower, machine age, task duration, soil type (for ground-breaking equipment) and other variables tied to efficiency. Proper maintenance and use of ultralow-sulfur diesel fuel will aid in reducing air pollutants from machinery.

In addition to criteria pollutants, construction activities would generate dust and other suspended particulates (temporary fugitive air pollutant emissions). Unpaved roads, parking lots, and exposed soil at the construction site provide sources of fugitive dust. Best management practices (BMPs) will be implemented onsite, requiring measures such as covering loads and applying water for dust suppression. Dispersal of air pollutants across the Project area and offsite will be influenced by the type and intensity of construction activity, extent of control measures, and natural factors such as wind and precipitation. With the use of appropriate BMPs, ambient air quality standards would not be exceeded, and construction activities would result in temporary, negligible impacts to air quality.

Any emissions from the operation of the Project would be generated by worker vehicles and maintenance equipment. Operating solar panels does not produce any emissions, including criteria pollutants, VOCs, or hazardous air pollutants (HAPs), during energy production. Therefore, facility operations would generate negligible levels of air pollutants. The Project will yield an overall benefit to air quality at both local and regional levels by reducing the use of non-renewable energy and offering an alternative, minimal- to zero-emission electricity source. The Project does not require an air quality permit.

2 Water Pollutants

2.1 Surface water

The Project is located within Hydrologic Unit 05130205, also referred to as the Lower Cumberland Watershed. The Lower Cumberland River drains 2,084 square miles in Kentucky and ultimately connects to the Ohio River near Smithland, Kentucky, west of the Project area (State of Kentucky 2021). The Project area is characterized primarily by moderately well-drained to well-drained silt loam soils (USDA 2021). There are water bodies within the Project boundary; however, none inside or directly adjacent to the boundary have been designated as Kentucky Special Waters by the Kentucky Division of Water (KDOW) (KDOW 2021).

Wetlands, ponds, and streams are present within the proposed Project boundary. These water bodies could be impacted by erosion and sedimentation generated by ground-disturbing construction activities. As with minimizing fugitive dust into the air, the Project will follow BMPs to limit surface water pollution from dust and sediment. Actions will include keeping ground-disturbing activities, such as grading and clearing, to a minimum. These actions generate conditions for erosion and sedimentation. Additionally, disturbed ground is prone to colonization by invasive species, which often require herbicide application to control.

Existing roads will be used as much as possible to minimize construction of additional access. If grading is deemed necessary and unavoidable, effort will be made to avoid drainages. Grading will follow the natural topography of the surrounding region to lower the risk of erosion. No fill above the permissible threshold is anticipated to be placed in jurisdictional waters during construction or operation of the project.

Erosion control and sedimentation prevention measures will also apply to construction assembly areas, which could result in overland sediment migration into wetlands. Staging or laydown areas will be in place and located entirely within the Project boundary for the full construction phase. Approximately 10-15 acres of the overall Project area will be used for staging areas.

Project construction may result in stormwater discharge. To mitigate effects from these activities, Caldwell Solar will use BMPs to protect jurisdictional wetlands and streams from sedimentation and prevent the migration of silt and sediment offsite. Silt fences, sediment basins, and 25-foot buffer zones will be used to prevent sedimentation of wetlands. Erosion control measures in disturbed areas, including using water to prevent dust and help compact the soil, will prevent sediment from entering jurisdictional waters and from moving offsite.

In compliance with KDOW, Caldwell Solar will design and implement a stormwater pollution prevention plan (SWPPP). Furthermore, the project will comply with the KDOW Construction Storm Water Discharge General Permit on actions that will influence one or more acres of land. A Notice of Intent and Notice of Completion will be submitted prior to and upon completion of construction.

Construction may generate hazardous materials such as fuel, lubricants, and hydraulic fluids that could potentially contaminate groundwater. While the use of these materials will be limited to essential use only, there remains a small risk of on-site spills. BMPs will be established to minimize spill risk and immediately address any spills that occur. Proper maintenance of machinery and vehicles will further reduce this risk. Hazardous materials will be appropriately stored, and chemicals such as herbicides and fertilizers will be used sparingly. Caldwell Solar does not anticipate further sources of groundwater pollution from facility operations. The completed photovoltaic (PV) panels will not include a runoff collection system, allowing rain to filter through vegetated soils into the groundwater table. In addition, disposal of these materials shall be in compliance with all applicable federal, state, and local regulations (RCRA).

Once construction is complete, vegetation cover will be planted using industry best practices to ensure stabilization of disturbed soils as quickly as possible to reach final stabilization. Seed mixes will be purchased from local, reputable sources. The vegetation will consist of low-growing, herbaceous plants and grasses from certified weed-free seed mixes. As soils stabilize, herbicide application in conjunction with mowing may be necessary to prevent the establishment of invasive species. In these instances, herbicides will be applied by certified commercial pesticide applicators who are licensed within the state of Kentucky. Applicators will use USEPA-registered and approved herbicides and strictly follow the herbicides' application instructions. Chemical application near wetlands would be restricted to prevent aquatic impacts. Stormwater BMPs shall be left in place until final stabilization per construction stormwater permit regulations has been achieved.

Any earth-disturbing activities which are a part of facility maintenance shall be required to implement BMPs and permit requirements as necessary to reduce impacts to surface water. Design of the solar facility will only require small, dispersed areas of impervious surfaces in the form of access roads, gravel pads, operations and maintenance (O&M) buildings, the substation, and switchyard, resulting in no or negligible impacts to surface waters from runoff. Much of the current land use is dedicated to cultivated crops and pasture, which introduce fertilizers, herbicides, and pesticides to the system. Application of these chemicals will be significantly reduced by converting agricultural land to solar fields. As such, surface water conditions may improve over the life of the project.

2.2 Groundwater

Aquifers are permeable bodies of rock and sediments that store and allow for underground movement of water. Rain and other precipitation permeates the ground, enters the aquifer, and can then resurface as a natural spring, be extracted through man-made wells, or discharge into waterbodies such as streams and lakes. The subterranean water is referred to as groundwater (United States Geological Survey [USGS] 2020). A Kentucky Geological Survey (KGS) Kentucky Groundwater Observation Network observation well (UKREC Princeton Farm well) is located east of the Project area (south of Princeton, Kentucky). Depth to water measured in 2017 and 2018 ranged from approximately 27 feet to approximately 37 feet below ground surface (University of Kentucky 2021).

The Project is not expected to generate adverse impacts to groundwater. Hazardous materials, including but not limited to fuel, lubricants, hydraulic fluids, herbicides, and fertilizers, will be limited to essential use only, properly stored, and used following proper techniques. Proper maintenance of machinery, spill prevention protocols, and readily available spill kits will be used to reduce the risk of groundwater contamination. The conversion of the Project area from agricultural land use to solar energy production will produce net reductions in fertilizer, herbicide, and pesticide use, thereby reducing chemical application to the landscape. Minor benefits to groundwater systems are anticipated as a result.

3 Waste

Project construction will generate very small quantities of hazardous waste. To avoid any on- and off-site impacts, all waste will be stored, handled, and disposed of in accordance with local, state, and federal regulations. Caldwell Solar will develop a hazardous material business plan to ensure materials are handled, used, and stored using BMPs, with resources and operating procedure guidelines in place in case of a spill. The plan will include spill prevention measures, proper training of personnel, providing appropriate personal protective equipment (PPE), keeping Material Safety Data Sheets (MSDS) for all hazardous chemicals, and maintaining spill kits and other cleanup materials onsite.

Materials will be properly stored in containers most appropriate for each type of waste and labeled in compliance with federal, state, and local regulations. All hazardous material storage units will include secondary containment so that in the unlikely event of primary container failure, a spill would not reach the environment.

Solid construction waste will be recycled, if possible. Non-recyclable solid materials will be removed from the Project site and disposed of at an appropriate regulated landfill. Anticipated solid waste includes construction debris, recyclables, and garbage, including packaging materials, storage boxes, wooden pallets, and building materials. Designated personnel will conduct daily inspections to ensure proper handling of wastes. This will include waste storage, labeling, cleanup, and disposal as well as recording the generated amounts of waste for Project records.

The primary sources of waste are expected to be the maintenance of equipment, vehicles and machinery and the replacement of damaged or worn-out materials. Construction machinery and vehicles will include semi-trucks, work trucks, excavators, and other equipment types that use gasoline, diesel, engine oil, and other petroleum-based products. These machines will produce hazardous liquid wastes such as used oil, diesel fuel, gasoline, hydraulic fluid, and other lubricants. Some vehicles may be refueled or undergo maintenance on-site. Spill prevention measures will consist of maintaining proper storage and material handling techniques and following procedure instructions for material use. Spill kits will be kept on all refueling vehicles and at strategic locations on-site. They will be easily accessible for any tasks that may incur a risk of spills.

Liquid supplies stored on site may include cleaning supplies, pesticides and herbicides, air conditioning fluids, machinery maintenance supplies (hydraulics fluids, degreasers), fuels (gasoline or diesel), paints, and propane. It is expected that these materials will be kept in small quantities, measuring less than 55 gallons, 500 pounds, or 200 cubic feet of each substance.

Construction will result in human waste, but no negative impacts to environmental resources are expected. To accommodate increased personnel during construction, portable chemical toilets will be provided. These portable toilets will be properly maintained and regularly pumped by a licensed sewage waste contractor. The waste will be disposed of at a regulated wastewater treatment plant. If a permanent septic system or wastewater disposal system is not already present, the addition of bathroom facilities with appropriate waste-handling procedures may be required for the standard facility operations.

Small quantities of other waste (paper, packaging, etc.) will be produced during both construction and facility operations. Appropriate disposal plans are in place for removing waste from the Project site to appropriate disposal or recycling facilities. Therefore, while facility construction and operations will generate hazardous and non-hazardous waste, due to their limited quantities and the implementation of spill prevention measures, they are not expected to negatively impact onsite or offsite resources.

4 Water Withdrawal

Construction and standard facility operations will require water. The Project plans to use existing wells for water supply. If there are no existing wells, or if existing wells are not sufficient for construction and operations, then a new well may be developed.

Construction activities will use water to prevent dust and sediment pollution into onsite air and wetlands. Ground-disturbing activities such as grading require water for soil compaction and dust control. Water used for any dust control measures will be properly handled using BMP protocols. Water may also be used during construction of building foundations and equipment pads, for washing equipment, and for other minor uses. The SWPPP will include regulations for both using water to clean equipment and appropriate disposal of this wastewater.

Anticipated use of water for construction is expected to be relatively minor and would not negatively impact groundwater resources. Once the facilities are complete, standard operations are expected to have low water requirements. The surrounding area receives enough rainfall throughout the year to contribute to aquifers and reduce the need to regularly wash the solar panels. Rainfall will be adequate to keep the PV panels largely free from dust and debris. Additionally, rain will contribute to ongoing vegetation management. Some water will be needed to maintain ground cover planted between the PV panels, ground-stabilization vegetation, and planted visual buffers. An irrigation system may need to be installed to sustain vegetation through periods of low rainfall.

Construction and operation of solar electricity-generating facilities are not anticipated to be water intensive. Water withdrawal for the Project is not expected to create negative effects on regional water resources.

5 References

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About Cardno

Cardno is an ASX-200 professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno's team includes leading professionals who plan, design, manage, and deliver sustainable projects and community programs. Cardno is an international company listed on the Australian Securities Exchange [ASX:CDD].

Cardno Zero Harm

Cardno
**ZERO
HARM**
EVERY JOB. EVERY DAY.

At Cardno, our primary concern is to develop and maintain safe and healthy conditions for anyone involved at our project worksites. We require full compliance with our Health and Safety Policy Manual and established work procedures and expect the same protocol from our subcontractors. We are committed to achieving our Zero Harm goal by continually improving our safety systems, education, and vigilance at the workplace and in the field.

Safety is a Cardno core value and through strong leadership and active employee participation, we seek to implement and reinforce these leading actions on every job, every day.