

FILE

PUCO EXHIBIT FILING

Date of Hearing: 3/1/2023

Case No. 21-868-EL-B&N

PUCO Case Caption: In the Matter of the Application of
Scioto Farms Solar Project, LLC, for a Certificate of
Environmental Compatibility and Public Need to
Construct a Solar-Powered Electric Generation
Facility in Peckaway County, Ohio

Volume III

List of exhibits being filed:

Applicant's Exhibits 34, 35, 37, 42

Chenback's Exhibit 14

PUCO

RECEIVED-DOCKETING DIV
2023 MAR 14 PM 12:14

This is to certify that the images appearing are an
accurate and complete reproduction of a case file
document delivered in the regular course of business.
Technician DCH Date Processed 3-14-23

Reporter's Signature: Karen Sue Gibson
Date Submitted: _____

RECEIVED
12/06/2022

Rolyn M. Brewster

AUDITOR ROSS COUNTY, OHIO



202200009184 12/06/2022 11:13AM
Filed for Record in ROSS County, OH
Kathy Dunn, Recorder Rec Fees: \$106.00
L OR Vol 565 Pgs 900 - 907
ERECORDING

CORRECTIVE RECORDING IN ROSS COUNTY, OHIO

Document: Memorandum of Land Lease and Solar Easement ("Memorandum of Lease")

Lessors: Thomas E. Ebenhack and Scarlett Y. Ebenhack, husband and wife

Lessee: Yellowbud Solar, LLC, a Delaware limited liability company

Recording Date: January 29, 2021

Recording Information: Official Record Book 547, Page 3892

The notary for the Lessors, Carolyn Eselgroth, inadvertently omitted her notary seal from the Lessors' notary acknowledgment in the Memorandum of Lease recorded as set forth above. The aforementioned Memorandum of Lease is being re-recorded to add such missing notary seal, effectively correcting the defect of record.

Ex 8



TE 11

(ABOVE LINE FOR RECORDER'S USE ONLY)

MEMORANDUM OF LAND LEASE AND SOLAR EASEMENT

THIS MEMORANDUM OF LAND LEASE AND SOLAR EASEMENT ("Memorandum of Lease") is entered into this 20th day of January, 2021, by and between Thomas E. Ebenhack and Scarlett Y. Ebenhack, husband and wife, whose address is 28901 Ebenhack Rd., Circleville, Ohio 43113 ("Lessor"), and Yellowbud Solar, LLC, a Delaware limited liability company, whose address is 8400 Normandale Lake Blvd., Suite 1200, Bloomington, MN 55437 ("Lessee"), and its successors and assigns.

PURPOSE OF AGREEMENT

Lessor, who owns certain real property in Union Township, Ross County, Ohio, legally described on the attached Exhibit A (the "Property"), has entered into a certain Land Lease and Solar Easement with Lessee, who intends to develop and operate a solar energy project on this Property, adjoining properties and other properties in the vicinity of the Property owned by others, for solar energy purposes (the "Project").

SUMMARY OF LEASE

1. Lessor and Lessee have entered into a certain Land Lease and Solar Easement dated January 20, 2021 (the "Lease Agreement"), whereby Lessor agreed to lease to Lessee a portion of the Property (as identified in Schedule A-1 and more fully described in the Lease Agreement, the "Premises"), together with certain easement interests, including, without limitation an Access Easement and a Solar Easement (each as defined below) across the Property, as shown on the site plan attached as Schedule A-1 (the "Site Plan").

2. The initial term of the Lease Agreement is for a period of up to two (2) years, commencing on the Effective Date (the "Development Period"). The Lease Agreement will automatically be extended for a Construction Period, as defined below, upon the earlier of (i) the date construction of Solar Facilities (as defined in the Lease Agreement) on the Premises commences ("Construction Date"); or (ii) the date Lessor receives written notice from Lessee of

Lessee's election to extend the term of the Lease Agreement for the Construction Period ("**Construction Period Notice Date**"). The Construction Period ("**Construction Period**") is two (2) years from the earlier of either of the Construction Date or the Extended Term Notice Date unless sooner terminated in accordance with the terms of the Lease Agreement. The Lease Agreement will automatically be extended for an Extended Term, as defined below, upon the earlier of (i) the date the Project begins commercial operation ("**Commercial Operation Date**"); or (ii) the date Lessor receives written notice from Lessee of Lessee's election to extend the term of the Lease Agreement for the Extended Term ("**Extended Term Notice Date**"). The Extended Term ("**Extended Term**") is twenty-five (25) years from the commencement of the Extended Date, unless sooner terminated in accordance with the terms of the Lease Agreement. Lessee has a right to renew the Extended Term for one (1) additional period of ten (10) years upon written notice to Lessor.

3. The parties wish to give notice of the existence of such Lease Agreement.

IN CONSIDERATION of the sum of One and 00/100 Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. Pursuant to the Lease Agreement, Lessee has the exclusive right to use the Premises for commercial solar energy purposes, together with certain related solar, access and other easement rights and other rights related to the Premises, all as more fully described in the Lease Agreement. "Commercial solar energy purposes" means converting solar energy into electrical energy and collecting and transmitting the electrical energy so converted, together with related activities, all as more particularly described in the Lease Agreement. The Lease Agreement contains certain easement grants by Lessor to Lessee, including, without limitation, the following easement interests that Lessor grants and conveys of record to evidence the same: (1) easements over, under, across, and on the Property for ingress to and egress from Solar Facilities (whether located on the Premises, on adjacent property or elsewhere) by means of existing roads and lanes, if any, or otherwise by the route or routes Lessee constructs from time to time, as shown on the Site Plan (the "**Access Easement**"); and (2) an exclusive easement on, over and across the Property for direct sunlight to any solar panels on the Premises and an exclusive easement prohibiting any obstruction (without regard for height or location) of direct sunlight (collectively, the "**Solar Easement**") throughout the entire Property to and for the benefit of the area existing horizontally three hundred and sixty degrees (360°) from any point where any solar panel is or may be located at any time from time to time (each point referred to as a "**Site**") and for a distance from each Site to the boundaries of the Property, together vertically through all space located above the surface of the Property, that is, one hundred eighty degrees (180°) or greater number or numbers of degrees as may be necessary to extend from each point on and along a line drawn along the surface from each point along the exterior boundary of the Property through each Site to each point and on and along the line to the opposite exterior boundary of the Property, as shown on the Site Plan, and both as more fully set forth in the Lease Agreement and subject to its terms.

2. Lessor will have no ownership and other interest in any Solar Facilities installed on the Premises by Lessee, except as provided in Section 4.3 of the Lease Agreement, and Lessee may remove any or all Solar Facilities at any time.

3. Lessee and any successor or assign of Lessee has the right under the Lease Agreement, without need for Lessor's consent, to do any of the following, conditionally or unconditionally, with respect to all or any portion of the Premises for solar energy purposes: grant co-leases, separate leases, subleases, easements, licenses or similar rights (however denominated) to one or more third parties; or sell, convey, lease, assign, mortgage, encumber, or transfer to one or more third parties or to any affiliate of Lessee's the Lease Agreement, or any right or interest in the Lease Agreement, or any or all right or interest of Lessee in the Premises or in any or all of the solar power facilities that Lessee or any other party may now or hereafter install on the Premises, except (i) any assignment, transfer or conveyance shall not extend beyond the term of the Lease Agreement; (ii) the assignee or transferee will be subject to all of the obligations, covenants and conditions applicable to the Lessee; and (iii) Lessee will not be relieved from liability for any of its obligations under the Lease Agreement by virtue of the assignment or conveyance unless Lessee assigns or conveys all of its interests under the Lease Agreement to the assignee or transferee, in which event Lessee has no continuing liability.

4. The Lease Agreement and the easement and rights granted Lessee in the Lease Agreement, including the Access Easement and the Solar Easement, burden the Property and run with the land for the Term of the Lease Agreement. The Lease Agreement inures to the benefit of and binds Lessee, and, to the extent provided in any assignment or other transfer under the Lease Agreement, any assignee of Lessee, and their respective heirs, transferees, successors, assigns, and all persons claiming under them.

5. This Memorandum of Lease has been executed and delivered by the parties for the purpose of recording and giving constructive notice of the Lease Agreement and easement rights in accordance with the terms, covenants, and conditions of the Lease Agreement.

6. The terms and conditions of the Lease Agreement are incorporated by reference into this Memorandum of Lease as if set forth fully within this Memorandum of Lease. In the event of any conflict between the terms and provisions of the Lease Agreement and this Memorandum of Lease, the Lease Agreement controls.

The remainder of this page is intentionally blank.

LESSEE SIGNATURE PAGE

LESSEE

Yellowbud Solar, LLC

By: 

Jeff Ringblom, Chief Financial Officer

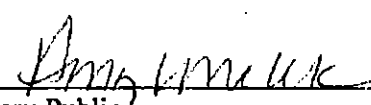
STATE OF MINNESOTA)

) ss.

COUNTY OF HENNEPIN)

The foregoing instrument was acknowledged before me this 25th day of September, 2021, by Jeff Ringblom, the Chief Financial Officer of Yellowbud Solar, LLC, a Delaware limited liability company, on behalf of the limited liability company.




Notary Public

LESSOR SIGNATURE PAGE

LESSOR

Thomas E. Ebenhack
Thomas E. Ebenhack

Scarlett Y. Ebenhack
Scarlett Y. Ebenhack

STATE OF OHIO)
COUNTY OF PICKAWAY) ss.

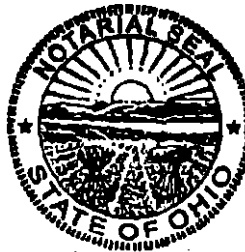
The foregoing instrument was acknowledged before me this January 20, 2021, by Thomas E. Ebenhack and Scarlett Y. Ebenhack, husband and wife.

Carolyn D. Eiselgroth
Notary Public

Printed Name: Carolyn D. Eiselgroth

My Commission Expires:

No expiration



CAROLYN D. EISELGROTH
Attorney At Law
Notary Public, State of Ohio
My commission has no expiration date
Sec. 147.03 R.C.

This instrument prepared by:
Yellowbud Solar, LLC
c/o National Grid Renewables Development, LLC
8400 Normandale Lake Blvd., Suite 1200
Bloomington, MN 55437

**SCHEDULE A
TO MEMORANDUM**

DESCRIPTION OF PROPERTY

Tax Parcel No.: 370902018000, 370902021000

Situated in the Township of Union, County of Ross, State of Ohio, described as follows:

Situated in the Township of Union, in the County of Ross and in the State of Ohio and bounded described as follows:

First Tract. Beginning at a stone on the original east line of Survey 4207-4719, and west line of survey 1447 and N. 20 deg. 52 min. E. 87 poles 20 links from stone in public highway and starting point to tract this day deeded to Charles J. Lutz; thence N. 69 deg. 08 min. W. 58 poles to a stone; thence N. 20 deg. 52 min. E. 15 poles 11 links to a stone near ditch; thence N. 69 deg. 03 min. W. 100 poles closely following ditch to stone on the edge of the ditch an oak tree bearing N. 20 deg. 52 min. E. 81 1/2 links distant; thence N. 20 deg. 52 min. E. 176 poles 15 links to a stone thence S. 69 deg. 08 min. E. 158 poles to a stone on original east line of survey No. 4207-4719; thence with said line of Survey 4207-4719) S. 20 deg. 52 min. W. 182 poles 1 link to the place of beginning, containing 180 acres of land more or less (being a part of Survey 4207-4719) excepting from the same one rod in width along the last named line for a private road, and for a public road if needed, the said tract hereby conveyed being the premises heretofore conveyed by Isaac Lutz et ux. to Mary E. Dunlap by warranty deed dated November 13th, 1895, recorded in Ross County Deed Record 119 page 546.

Second Tract. Beginning at a stone in the south east corner of a certain tract of land deeded to David J. Parker by Ada Eisenbrey and John H. Eisenbrey her husband, by deed dated March 3rd, 1896, recorded in Ross Co. Deed Record 121, page 27, and also corner to the land of Mary E. Dunlap and the Thomas Brown heirs; thence with the line of the Thomas Brown heirs N. 70 3/4 W. 125 poles to a stone corner to Wm. Parker's land (from which a hickory bears N. 65 W. a distance of 37 feet); thence with the line of Wm. Parker N. 19 1/4 E. 91 poles and 20 links to a stone and in the line of George Tootle; thence with the line of George Tootle S. 70 3/4 E. 128 poles and 13 links to a stone corner to Mary E. Dunlap; thence with Dunlap's line S. 21 3/4 W. 93 poles to the place of beginning containing 72 acres 2 rods and 31 poles, more or less, and also a certain right of way one rod wide extending from the above described lands through the lands of Wm. Parker to the Westfall road; the said tract hereby conveyed being the premises heretofore conveyed by Bochard et al to Mary E. Dunlap by deeds dated December 14th and 29th respectively, and recorded in Ross County Deed Records 162, pages 190 and 192.

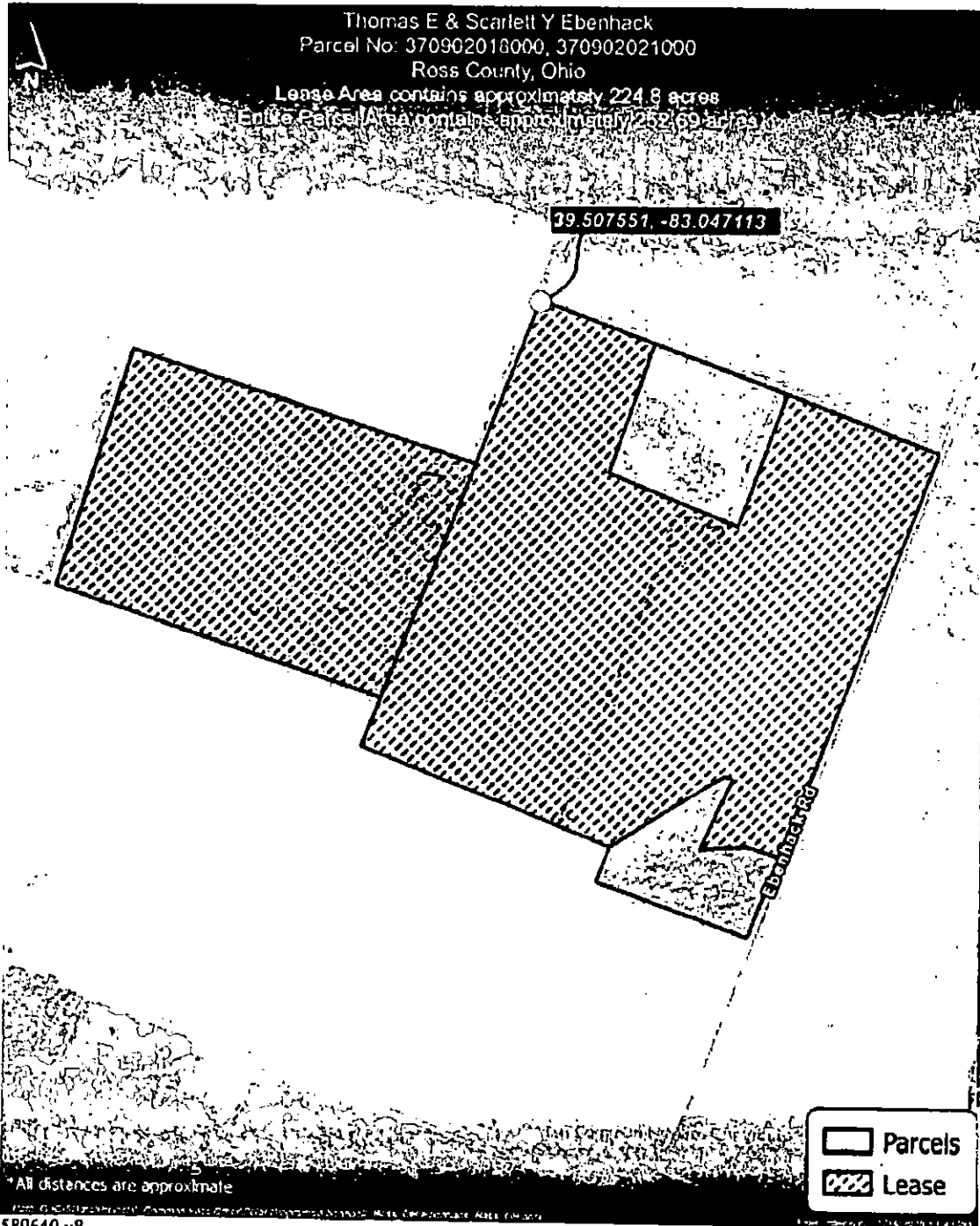
The parcel contains approximately 252.69 acres more or less.

National Grid Renewables, LLC
8400 NORMANDALE LAKE BLVD STE 1200
MINNEAPOLIS, MN 55437-3850

Inst #202200009184

SCHEDULE A-1 TO MEMORANDUM

SITE PLAN



RECEIVED
07/07/2021

Thomas M. Spitz
AUDITOR ROSS COUNTY, OHIO



202100006057 07/07/2021 10:21AM
Filed for Record in ROSS County, OH
Kathy Dunn, Recorder Rec Fees: \$90.00
LA OR Vol 552 Pgs 1784 - 1789
ERECORDING

(ABOVE LINE FOR RECORDER'S USE ONLY)

**FIRST AMENDMENT TO MEMORANDUM OF LAND LEASE
AND SOLAR EASEMENT**

THIS FIRST AMENDMENT TO MEMORANDUM OF LAND LEASE AND SOLAR EASEMENT ("Amendment") is entered into this 19th day of June, 2021 pursuant to Ohio Revised Code Section 5301.351 by and between Thomas E. Ebenhack and Scarlett Y. Ebenhack, husband and wife ("Lessor") and Yellowbud Solar, LLC, a Delaware limited liability company, ("Lessee"), and its successors and assigns.

A Lessor and Lessee are parties to that certain Land Lease and Solar Easement dated January 20, 2021 (the "Lease"), as evidenced by that certain Memorandum of Land Lease and Solar Easement dated January 20, 2021, recorded January 29, 2021 in Official Record Book 547, Page 3892 in the Ross County, Ohio Recorder's Office Records (the "Memorandum").

B. The above referenced Land Lease and Solar Easement was amended by the parties by that certain First Amendment to Land Lease and Solar Easement dated June 19, 2021. Said First Amendment, together with the Original Lease, are together the "Lease." The Lease affects that certain real property in Ross County, Ohio described on the attached Exhibit A (the "Property"). Lessee leases all or a portion of such Property and possesses the easements as provided in the Lease and/or the prior recorded Memorandum cited above. Having amended the Lease, the parties desire to provide evidence of such action by recording this Amendment.

1. Section 3.2 of the Lease was amended to provide for a different time schedule for certain rent payments. The parties acknowledge that neither the revised payment schedule nor commencement of construction of the Project substation on or near the Property shall be deemed to trigger the commencement of the Construction Period.

2. This First Amendment to Memorandum of Lease has been executed and delivered by the parties for the purpose of recording and giving constructive notice of the Lease (as amended)

10792431.1

EXHIBIT

re 10

and easement rights in accordance with the terms, covenants and conditions of the Lease. The terms and conditions of the Lease as amended and the prior Memorandum are incorporated by reference into this Amendment as if set forth fully herein at length. Except as hereby amended the Memorandum remains in effect. In the event of any conflict between the terms and provisions of the Lease and this Amendment, the Lease as amended shall control.

This Instrument Prepared By:
Yellowbud Solar, LLC
c/o National Grid Renewables, LLC
8400 Normandale Lake Blvd., Suite 12020
Bloomington, MN 55437

[The remainder of this page is intentionally blank; signature pages to follow.]

[Lessee Signature Page to First Amendment to
Memorandum of Land Lease and Solar Easement]

LESSEE:

Yellowbud Solar, LLC.
a Delaware limited liability company

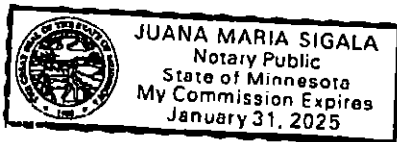
By: 

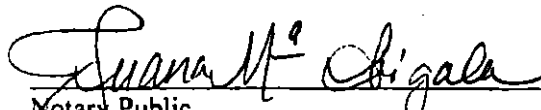
Name: David Reamer

Its: President

STATE OF MINNESOTA)
) ss.
COUNTY OF HENNEPIN)

The foregoing instrument was acknowledged before me this 24th day of June, 2021 by David Reamer, the president of Yellowbud Solar, LLC, a Delaware limited liability company, on behalf of the limited liability company. This is an acknowledgement, and no oath or affirmation was administered to the signer.




Notary Public

10792431.1

[Lessor Signature Page to First Amendment to
Memorandum of Land Lease and Solar Easement]

LESSOR:

Thomas E. Ebenhack
Thomas E. Ebenhack

STATE OF OHIO)
COUNTY OF Pickaway) ss.

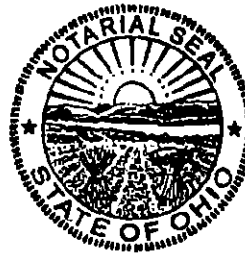
The foregoing instrument was acknowledged before me this June 19, 2021 by Thomas E. Ebenhack. This is an acknowledgement, and no oath or affirmation was administered to the signer.

Carolyn D. Eselgroth

Notary Public

Printed Name: _____

My Commission Expires: _____



CAROLYN D. ESELGROTH
Attorney At Law
Notary Public, State of Ohio
My commission has no expiration date
Sec. 147.03 R.C.

10792431.1

[Lessor Signature Page to First Amendment to
Memorandum of Land Lease and Solar Easement]

LESSOR:

Scarlett Y. Ebenhack
Scarlett Y. Ebenhack

STATE OF OHIO)
COUNTY OF Pickaway) ss.

The foregoing instrument was acknowledged before me this June 19, 2021 by
Scarlett Y. Ebenhack. This is an acknowledgement, and no oath or affirmation was administered
to the signer.

Carolyn D. Eiselgroth

Notary Public

Printed Name: _____

My Commission Expires:



CAROLYN D. EISELGROTH
Attorney At Law
Notary Public, State of Ohio
My commission has no expiration date
Sec. 147.03 R.C.

10792431.1

Inst #202100006057

**EXHIBIT A
TO
FIRST AMENDMENT TO MEMORANDUM OF
LAND LEASE AND SOLAR EASEMENT**

PROPERTY

Legal Description of the Property

Tax Parcel No.: 370902018000 and 370902021000

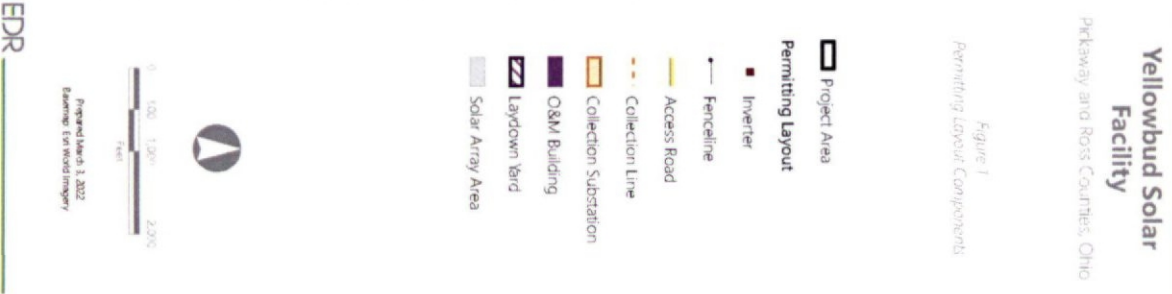
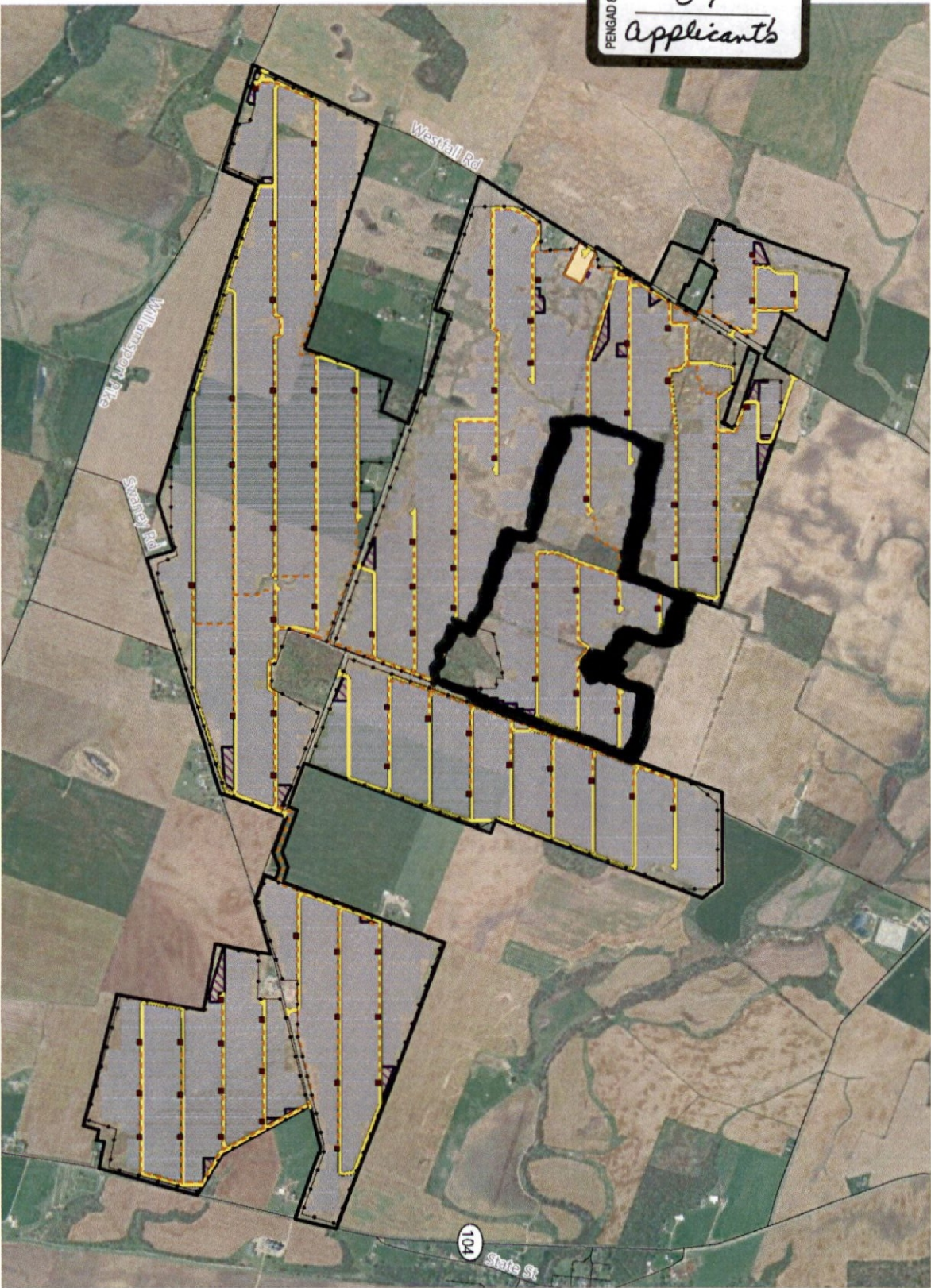
Situated in the Township of Union, County of Ross State of Ohio, described as follows:

First Tract. Beginning at a stone on the original east line of Survey 4207-4719, and west line of survey 1447 and N. 20 deg. 52 min. E. 87 poles 20 links from stone in public highway and starting point to tract this day deed to Charles J. Lutz; then N. 69 deg. 08min. W. 58 poles to a stone; thence N. 20 deg. 52 min. E. 15 poles 11 links to a stone near ditch; thence N. 69 deg. 03 min. W. 100 poles closely following ditch to stone on the edge of the ditch an oak tree bearing N. 20 deg. 52 min. E. 81 1/2 links distant; thence N. 20 deg. 52 min E., 176 poles 15 links to a stone thence S. 69 deg. 08 min. E. 158 poles to a stone on original east line of survey No. 4207-4719; thence with said line of Survey 4207-4719) S. 20 deg. 52 mins. W. 182 poles 1 link to the place of beginning, containing 180 acres of land more or less (being a part of Survey 4207-4719) excepting from the same one rod in width along the last named line for a private road, and for a public road if needed, the said tract hereby conveyed being the premises heretofore conveyed by Isaac Lutz et ux. To Mary Dunlap by warranty deed dated November 13th, 1895, recorded in Ross County Deed Record 119 page 546.

Second Tract. Beginning at a stone in the south east corner of a certain tract of land deeded to Daid J. Parker by Ada Eisenbrey and John H. Eisenbrey her husband, by deed dated March 3rd, 1896, recorded in Ross Co. Deed Record 121, page 27, and also corner to the land of Mary E. Dunlap and the Thomas Brown heirs; thence with the line of the Thomas Brown heirs N. 70 $\frac{3}{4}$ W. 125 poles to a stone corner to Wm. Parker's land (from which a hickory bears N. 65 W. a distance of 37 feet); thence with the line of Wm. Parker N. 19 $\frac{1}{4}$ E. 91 poles and 20 links to a stone and in a line of Geoge Tootle; thence with the line of George Tootle s. 70 $\frac{3}{4}$ E. 128 poles and 13 links to a stone corner to Mary E. Dunlap; thence with Dunlap's line S. 21 $\frac{3}{4}$ W. 93 poles to the place of beginning containing 72 acres 2 rods and 31 poles, more or less, and also a certain right of way one rod wide extending from the above described lands through the lands of Wm. Parker to the Westfall road; the said tract herby conveyed being the premises heretofore conveyed by Bochard et al to Mary E. Dunlap by deeds dated December 14th and 29th respectively, and recorded in Ross County Deed Records 162, pages 190 and 192.

The parcel contains approximately 252.69 acres more or less.

Figure 1. Permitting Layout Components





From: James Woodruff <woodruffjames82@gmail.com>
Subject: Scioto Farms Solar Project -- Concern Regarding Well Water Containment
Date: August 23, 2022 at 1:23:10 PM PDT
To: webenhack@live.com

Good Afternoon.

As we discussed at our meeting with you and your family on August 8, we hope to address fully each of the concerns that you have raised about the Scioto Farms Solar Project. This will be the first of several communications on the various topics that you have raised. Please share this information with your family and let us know if you have any additional questions on this topic. You have raised a concern about well water containment, and, specifically, the possibility of toxic materials from the solar arrays leaching into the water supply.

Proposed Condition No. 28 in the OPSB Staff Report requires that the Project identify all water wells within the project area and further requires a minimum setback of 50 feet from all such wells. Specifically, Condition No. 28 provides:

All water wells within the project area shall be "ground-truthed" to determine the exact locations prior to construction. The Applicant shall adhere to a minimum project infrastructure setback of 50 feet from any existing domestic use water supply well.

The Project intends to install crystalline silicon solar panels. For a discussion of the materials commonly found in this type of panel, please see, <https://content.ces.ncsu.edu/health-and-safety-impacts-of-solar-photovoltaics> at section 1.2.2.a. These materials do not represent an environmental hazard per se. Additionally, all crystalline silicon solar panels are contained in a solid matrix, are insoluble, and are fully enclosed. Therefore, under foreseeable operating conditions, release of materials into the environment or into the water supply specifically is not a concern.

The Environmental Protection Agency has conducted tests on solar panels pursuant to its Toxicity Characteristics Leaching Procedure (TCLP). The TLCP entails cutting modules into 1-centimeter blocks and putting them into an acid bath to evaluate any potential that the materials in the panels will leach. No modules have failed this test in the last 15 years. See, <https://www.epa.gov/hw-sw846/sw-846-test-method-1311-toxicity-characteristic-leaching-procedure>

The combination of OPSB-proposed setbacks, the non-toxic nature of the materials used in panels and testing to demonstrate that such materials will not leach into the environment should address concerns regarding contamination of wells or water supply. Additionally, should any panels become damaged or broken during operation of the project, the operators will replace the broken or damaged panels promptly and dispose of them off-site, further mitigating any possibility of leaching into the soil or water supply.

Let us know if you have any further questions on this topic.

Best regards,
Jim Woodruff

From: James Woodruff <woodruffjames82@gmail.com>

Subject: Scioto Farms Solar Project -- Concerns Regarding Grading and Top Soil Management

Date: August 25, 2022 at 1:31:26 PM PDT

To: webenhack@live.com

You have raised concerns regarding grading and topsoil management. Unless otherwise directed by the landowner, the project intends to minimize grading to the fullest extent possible. Minimizing cut and fill not only maintains the agricultural character of the property and existing drainage, it is also in the project's economic interest because extensive civil works and engineering add cost. Well-established means and methods for construction in the industry have evolved to allow solar arrays and support systems to follow the existing topography of the land to minimize the need for grading. Accordingly, we expect grading to occur only intermittently in some areas of the project site.

OPSB Proposed Condition No. 10 addresses grading:

At least 30 days prior to the preconstruction conference, the Applicant shall file a final grading plan which demonstrates, in compliance with the decommissioning condition, that the project would not obstruct future agricultural land use or a land use otherwise specified by the landowner. The plan shall include, but is not limited to the following:

1. Preconstruction and proposed one foot contours referenced to U.S. Geological Survey datum.
2. Drainage arrows which delineate preconstruction and proposed drainage patterns
3. Estimated earthwork quantities including the amount of cut and fill and the amount of soil to be exported or imported (in cubic yards)
4. Location of proposed areas of cut and fill, including the extent and maximum depth of cut and fill
5. Location of proposed project infrastructure
6. Location of existing surface water locations

It is the project's intention to minimize the effect of cut and fill by restoring topsoil to affected areas during and after construction. Although not specifically mentioned in Condition 10, the project has committed as part of its application to restoring topsoil to areas that have been graded. As noted at p. 46 of the OPSB Staff Report, the project has committed that "Excavated topsoil will be separated during construction and returned as topsoil after construction unless otherwise specified by landowners [and that] [d]isturbed areas upon decommissioning will be restored for agricultural use." Additionally, proposed Condition No. 26 of the OPSB Staff Report, broadly relating to decommissioning, requires that the project submit a decommissioning plan at least 30 days prior to the commencement of construction that, among other things,

From: James Woodruff <woodruffjames82@gmail.com>
Subject: Scioto Farms Solar Project -- Fire Safety Concerns
Date: August 26, 2022 at 2:31:31 PM PDT
To: webenhack@live.com

Good Afternoon,

You have raised concerns regarding fire safety at the Scioto Farms Solar Project. We do not wish to mischaracterize your concerns, but they appear to be focused on (1) the possibility that fire will occur within the facility as a result of operation of the solar panels and associated generating equipment; and (2) challenges associated with responding to a fire that occurs within the facility.

With respect to the first issue, a 2017 white paper from North Carolina State University states:

The possibility of fires resulting from or intensified by PV systems may trigger concern among the general public as well as among firefighters. However, concern over solar fire hazards should be limited because only a small portion of materials in the panels are flammable, and those components cannot self-support a significant fire. Flammable components of PV panels include the thin layers of polymer encapsulates surrounding the PV cells, polymer backsheets (framed panels only), plastic junction boxes on rear of panel, and insulation on wiring. The rest of the panel is composed of non-flammable components, notably including one or two layers of protective glass that make up over three quarters of the panel's weight. Heat from a small flame is not adequate to ignite a PV panel, but heat from a more intense fire or energy from an electrical fault can ignite a PV panel.

One real-world example of this occurred during July 2015 in an arid area of California. Three acres of grass under a thin film PV facility burned without igniting the panels mounted on fixed-tilt racks just above the grass. While it is possible for electrical faults in PV systems on homes or commercial buildings to start a fire, this is extremely rare. Improving understanding of the PV-specific risks, safer system designs, and updated fire-related codes and standards will continue to reduce the risk of fire caused by PV systems.

Health and Safety Impacts of Solar Photovoltaics, <https://content.ces.ncsu.edu/health-and-safety-impacts-of-solar-photovoltaics> (May, 2017) (citations omitted).

With respect to the second issue, OPSB Condition 11 specifically addresses concerns related to suppressing fire and emergency response by requiring the project to submit a comprehensive plan:

At least 30 days prior to the preconstruction conference, the Applicant shall submit its emergency response plan that includes and addresses, but is not limited to, the following: scope of the plan, communication and training, roles

From: James Woodruff <woodruffjames82@gmail.com>
Subject: Scioto Farms Solar Project -- Traffic Safety and Visibility
Date: August 27, 2022 at 4:51:54 PM PDT
To: webenhack@live.com

Good Evening,

You have raised concerns regarding traffic safety and visibility on Dungan Road and at the intersection of Dungan Road and Route 104. Since our last meeting with you, we have asked our engineering contractor to perform a "sight distance" analysis in accordance with Ohio Department of Transportation's (ODOT) *Location and Design Manual*, Section 200, *et seq.* <https://www.transportation.ohio.gov/working/engineering/roadway/manuals-standards/location-design-vol-1/0200> (Manual). The Manual provides a methodology for determining the sufficiency of "sight distance" on roads and at intersections.

Candela's engineering contractor has created two conceptual figures, one estimating the sufficient sight distance for the curve on Dungan Road traveling West towards Ebenhack Road (*Figure 1*) and the other estimating sufficient sight distance at the intersection of Route 104 and Dungan Road (*Figure 2*). This area is shown in green on *Figure 1* and *Figure 2*. *Figure 1* and *Figure 2* also show (in blue) the minimum setback requirements for the project from the centerline of the roadways required by OPSB. Both figures demonstrate that the sufficiency of sight distance is not impaired by the project.

Prior to construction of the project, Candela's EPC contractor will verify actual site distance sufficiency in order to design fences, vegetation and other potential obstructions in accordance with the Manual. During construction and operation of the project, the area between the project fence line and the roadway will not be used for crops. Landscaping and other vegetation in these areas will be maintained in accordance with ODOT's guidelines and OPSB's final permit conditions.

Please let us know whether you have additional questions regarding traffic safety and visibility.

Best Regards,

Jim Woodruff



Phone (952) 937-9150 12751 Whitecap Drive, Suite 9100
Fax (952) 937-9822 Minneapolis, MN 55343
Toll free (800) 937-9150 www.wpsdps.com
Weatherford Professional Services, Inc.



360 Pine Street, Suite 500
San Francisco, CA 94104

END

DATE	COMMENT
08/25/23	Sight Distance and Call Tree Road Exhbit

811 Know what's below.
Call before you dig.

811 Know what's below.
Call before you dig.



Pickaway County, Ohio

Intersection Site
Distance - SR 104 &
Dungan Road

NOT FOR CONSTRUCTION

DATE 08/25/2022

一
白

	PROJECT BOUNDARY
	ALTA PARCEL LINES
	RIGHT-OF-WAY LINES
	EASEMENT LINES
	EX. INTER. CONTOUR
	EX. INTER. CONTOUR
	EX. TRAILLINE
	EX. PAVED ROAD
	EX. GRAVEL ROAD
	EX. FENCE
	EX. OVERHEAD POWER
	EX. SHALE
	EX. GAS LINE
	PROPOSED ACCESS ROADS
	PROPOSED POWER LINES
	PROPOSED MEDIUM VOLTAGE
	PROPOSED HIGH VOLTAGE
	UNDERGROUND COLLECTION LINE
	PROPOSED SILT FENCE
	SECURITY FENCE
	APPROXIMATE SITE TRIANGLE



APPROXIMATE SIGHT
TRIANGLE (IPC TO VERIFY
ACTUAL SIGHT TRIANGLE
DISTANCES MEET ODOT
REQUIREMENTS)

Scioto Farms Solar Project

Pickaway County, Ohio

Line of Sight - Dungan Road

NOT FOR CONSTRUCTION

DATE: 08/25/2022

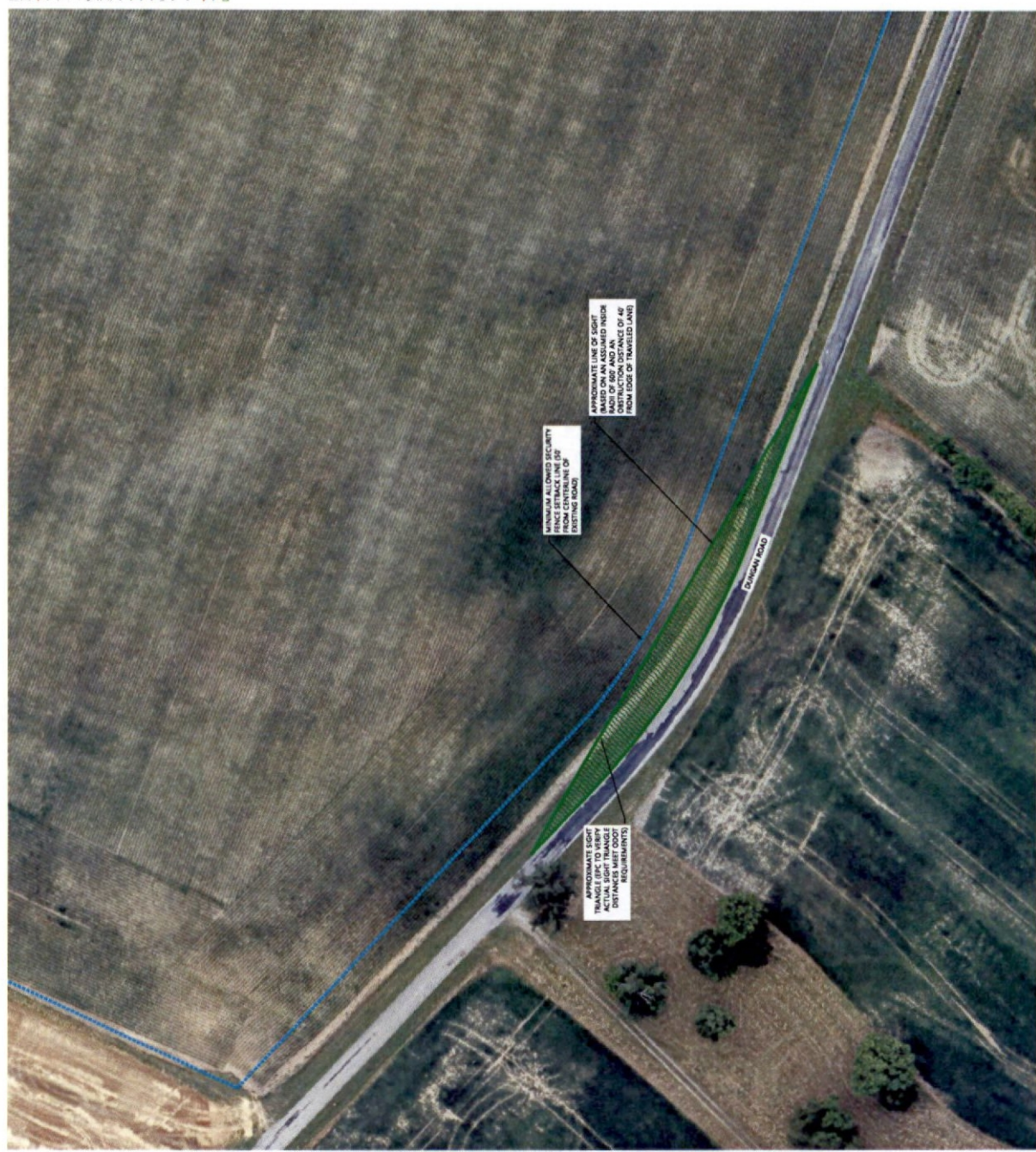
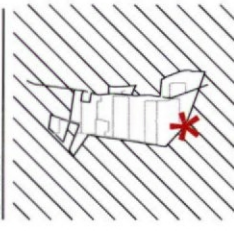
SHEET:

2

LEGEND:

- | | |
|--|------------------------------|
| | PROJECT BOUNDARY |
| | ALTA PARCEL LINES |
| | RIGHT-OF-WAY LINES |
| | ADJUTMENT LINES |
| | DE POSSE CONTOUR |
| | DE TRAILLINE |
| | DE PAVED ROAD |
| | DE GRAVEL ROAD |
| | DE FENCE |
| | DE OVERHEAD POWER |
| | DE SWALE |
| | DE VALI LINE |
| | PROPOSED ACCESS ROAD |
| | PROPOSED SECURITY FENCE |
| | PROPOSED SECURITY FENCE |
| | UNDERPASSING COLLECTION LINE |
| | PROPOSED 5' FENCE |
| | PROPOSED 5' FENCE |
| | APPROXIMATE STIT TRIANGLE |

KEY MAP:



MINIMUM ALLOWED SECURITY
FENCE SETBACK LINE (50'
FROM CENTERLINE OF
EXISTING ROAD)

APPROXIMATE LINE OF SIGHT
(BASED ON AN ASSUMED INSIDE
RADIUS OF 500' AND AN
OBSTRUCTION DISTANCE OF 40'
FROM EDGE OF TRAVELED LANE)

APPROXIMATE SIGHT
TRIANGLE (EPC TO VERIFY
ACTUAL SIGHT TRIANGLE
DISTANCES MEET ODOT
REQUIREMENTS)

From: James Woodruff <woodruffjames82@gmail.com>
Subject: Scioto Farms Solar Project -- Delivery Vehicle Staging and Parking
Date: August 28, 2022 at 5:26:03 PM EDT
To: webenhack@live.com

Good Evening,

You have raised concerns about the possibility of trucks and other vehicles parking along Route 104 during construction of the project. We have reviewed this issue with Candela's engineering contractor and asked them to design a conceptual "truck staging area" within the project perimeter to alleviate this concern to the extent possible. Attached *Figure 3* shows a conceptual parking and turn-around area inside the fence line of the project where the existing driveway to the existing cell tower connects to Route 104. This is a planned ingress point for the project adjacent to conceptual lay-down areas for construction. As currently configured, the staging and turn-around area would accommodate ten 53-foot tractor trailers.

We are also looking at other means to discourage parking along Route 104, including requesting Ohio Department of Transportation (ODOT) or another authority with jurisdiction to install temporary signage meeting applicable traffic ticketing and towing laws and prohibiting parking. Installation and maintenance of signage would need to be accomplished by ODOT or other appropriate authority.

We believe the measures we are proposing will effectively limit and discourage construction parking on Route 104.

Please let us know if you have any questions regarding *Figure 3* or the additional measures that we have proposed.

Best regards,

Jim Woodruff

Scioto Farms Solar Project

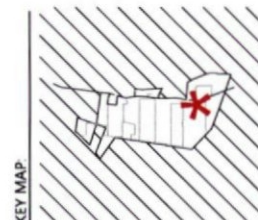
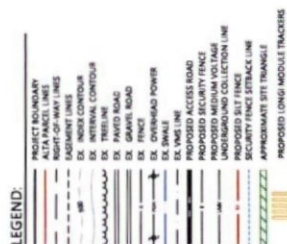
Pickaway County, Ohio

Cell Tower Access
Road Turnaround and
Parking Area

NOT FOR CONSTRUCTION

DATE: 08/25/2022

1



From: James Woodruff <woodruffjames82@gmail.com>

Subject: Scioto Farms Solar Project; Fire incident at California Valley Solar Project

Date: September 6, 2022 at 10:06:16 AM PDT

To: webenhack@live.com

Good Afternoon.

You have raised concerns regarding a fire incident which was reported at Clearway's California Valley Solar Project in the Carrizo Plains area of Central California. See, '[Avian incident' knocks out 84% of massive California solar farm](https://www.latimes.com/local/lanow/la-me-ln-avi-2022-09-06)<https://www.latimes.com/local/lanow/la-me-ln-avi-2022-09-06>. We have researched whether there are any publicly available incident reports or other materials that we can provide you regarding this fire and, to our knowledge, there are none. However we are familiar with both the project and the fire incident that you have identified.

The California Valley Solar Project was constructed using Sunpower mono-silicon panels. It is one of the earlier utility-scale PV solar projects. Construction began in 2011, and the project achieved commercial operation in 2013. NRG Energy owned and operated this project until the asset was transferred to Clearway, which now operates the facility. It is a 250 MW project, which covers approximately 2,000 acres of grasslands. The configuration of the project includes seven separate "islands" of arrays with an above-ground internal collection system consisting of poles and wires that convey electricity from the arrays to the project substation. The collection lines cross the open areas among the islands in many places and are also above ground within the islands themselves. Sunpower's permits required the construction team to leave existing vegetation in place, rather than mowing or discing and rolling. The height of this vegetation has been managed during operations, but there is significant dry and combustible material within the fence lines and among the islands. As a general proposition, design and construction methods have evolved considerably since the California Valley project was operationalized; many of the means, methods and equipment employed there will not be present in the proposed Scioto Farms Solar project.

It is our understanding Sunpower's approach to site preparation and vegetation management has resulted in the interior areas of the project being prime habitat for small mammals (such as mice, voles, greater kangaroo rat and kit fox), reptiles and passerine birds, which are nesting and foraging in the area. Although some have viewed this as a positive side effect of the project (this is one of the reasons why the site preparation technique was used), the unintended consequence of this small animal population has been to attract ravens to the area for nesting and foraging. It is our understanding that due to the lack of trees in the area, the raven population has frequently established nests in the collection system poles and towers and in other infrastructure associated with the project. Denying ravens access to these areas has been an ongoing effort for the project operators.

As reported in the article you provided, one of the ravens managed to touch two of the collection wires causing a phase event and arcing which in turn caused the raven to combust and fall into dry vegetation at the site resulting in a fire.

In our investigation of this event, we have learned that, although the fire did temporarily disrupt operations at the facility, it did not reach a temperature that caused any panels to combust or melt. It is further our understanding that no toxic fumes were released during the fire, and because the integrity of panels was not breached, there were no impacts on the underlying soils or groundwater other than those associated with the brush fire itself, which, unfortunately, is not an uncommon occurrence in this area. As we have noted in separate correspondence to you, extensive testing by EPA demonstrates that even under extreme heat conditions (not present during this incident), materials in mono-silicon or polysilicon panels do not disaggregate or leach into the environment. Finally, it is our understanding that the fire itself was largely contained within the project perimeter.

The proposed Scioto Farms Solar Project should be distinguished for several reasons:

- First, and perhaps most importantly, the existing environmental conditions found at the project site are markedly different than those found in the Carrizo Plains. There is little or no dry, combustible brush on the Scioto Farms project site. Any vegetation growing within the site during operations will be maintained in accordance with approved vegetation management plans submitted to and approved by the OPSB, taking into account approved fire and safety plans also submitted to and approved by OPSB.
- Second, the surrounding environment at Scioto Farms is also markedly different than what is found in the Carrizo Plains, consisting largely of fields under agriculture (including associated irrigation), forested areas and riparian areas. Overall, Central Ohio is a much wetter, and therefore less combustible, region than what is found in the Central Highlands of California.
- Third, although some or all of the interior collection system at Scioto Farms likely will be located above ground, the lines and poles will not cross areas outside of the project perimeter, as is the case at the California Valley Solar project.
- Fourth, the Scioto Farms project will voluntarily comply with design recommendations and best practices promulgated by the Avian Power Line Interaction Committee (APLIC) of the Edison Electric Institute regarding spacing of collection conductors and managing nesting in electrical infrastructure. See, [https://www.aplic.org/uploads/files/2643/SuggestedPractices2006\(LR-2\).pdf](https://www.aplic.org/uploads/files/2643/SuggestedPractices2006(LR-2).pdf) for a discussion of these issues, standards and recommendations. We do not know whether the California Valley Solar project, being one of the earliest PV projects constructed, incorporated APLIC's recommended design and safety features,

but following them at Scioto Farms will greatly reduce, if not eliminate, the risk of birds causing a phase event and arcing.

In summary, the California Valley Solar project fire event was caused by a unique combination of factors, including the design of the project, the presence of combustible materials in the project interior and adjacent land, the prevalence of prey, the presence of ravens, and the unfortunate arcing event that ultimately caused the fire. Furthermore, it does not appear that the fire caused any environmental contamination. In contrast, the proposed Scioto Farms Solar Project will be constructed and operated in a substantially different region that is characterized by abundant water and a paucity of combustible materials both on and off the project site. Additionally, design, construction and operational protocols have advanced significantly over the last ten years, such that fire risk from avian interactions will be substantially avoided at the Scioto Farms Solar Project.

Please let us know whether you have any additional questions regarding the California Valley fire incident or fire risk at the proposed Scioto Farms Solar Project.

Best Regards,

Jim Woodruff

626 807 8971

 **FILE**

Ebenhacks' Exhibit 14

21-868-EL-BGN

Exhibit- Sign in Sheets for Hearing held on 5/25/2022 for the Scioto Farms Solar Public Hearing

RECEIVED-DOCKETING DIV
2022 JUN 28 PM 2:55
PUCO

This is to certify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business.
Technician SL Date Processed 6-28-22



Scioto Farm Solar Public Hearing, Case #21-0868-EL-BGN

SUPPORT

[illegible]

Ohio | Power Siting Board

Scioto Farm Solar Public Hearing, Case #21-0868-EL-BGN

OPPOSE

Hearing Date: May 25, 2022

Name (Please Print)	Address	
Connie Kisee	27061 Westfall Rd Wayne Twp	
Louisa Schweitzer	509 Plaza Dr. Circleville OH	
9/1 Harvey W. Harland	24666 St. Rt. 104 Circleville Ohio 43113	
David W. Wells	24622 Westfall Rd Circleville	
Paula K. Metzger	4127 Dungan Rd Circleville 43113	
Thomas S. Thompson	28911 Edwards Rd Circleville	

Ohio | Power Siting Board

Scioto Farm Solar Public Hearing, Case #21-0868-EL-BGN

OPPOSE

Hearing Date: May 25, 2022	
Name (Please Print)	Address
Patricia Mullins	558 Greenacre Ct Circleville, OH
Reg Mullins	558 Greenacre Ct, Circleville OH 43113
Patricia Hamilton	22798 Morris West Stouenville OH
Marian Garner	19428 Hill Rd. Circleville
Carl Fellet	32373 Dublin Hill Rd, Mt. Sterling, OH 43083
Williamman	11000 Judas Road New Holland OH 43145
Adrienne Barnes	20245 Pherson PK Williamsport OH 43164
Allison Barnes	20245 Pherson PK. Williamsport OH 43164
Lauren Barnes	20245 Pherson PK. Williamsport OH 43164

Ohio | Power Siting Board

Scioto Farm Solar Public Hearing, Case #21-0868-EL-BGN

OPPOSE

Name (Please Print)		Address		Hearing Date: May 25, 2022
April Riger		26845 Immell Rd	Circleville OH 43113	
Justin Barnes		20245 Pearson Pike	Willu-sport OH 43124	
Wendy Gardner		19447 Madison Walnut Rd	43103	
Steven C. Garner		19428 Hill Rd	Circleville, Ohio, 43123	
Susan L Boggs		8245 Harrisburg Rd	Orient OH 43113	
Leo A. Metzger		4127 Dungan Rd	Circleville, Oh.	
Eric D resback		22058 Belender Pkwy	Rd Circleville OH	
Tom Spring		335 Meadow Lane	Circleville Ohio 43113	
Thomas J Ebenbach		2453 Fair Ave	Barkley OH 43209	

Ohio | Power Siting Board

Scioto Farm Solar Public Hearing, Case #21-0868-EL-BGN

OPPOSE

Name (Please Print)		Address		Hearing Date: May 25, 2022
Dustin A. Bethel		26422 Westdell Rd Circleville, OH 43112	Wayne Twp	
Timothy N Hartsock		8 Warnerwood Dr, Gillingham OH 45601		
Chris Weaver		20749 JUSTUS Rd W. Mansport, OH		43164
Charlitt Ebenhack		28901 Ebenhack Rd Circleville		
Karen Rose		6480 Hatfield Rd. Wm'sport, OH		43164
Bron Rose		6780 Hatfield R. Williamsport		OH 43164
Bennett Morrison		15741 Whiteside Rd, Orient, OH 43106		
Ariana F. Neesback		22058 Blender-Parkway Rd, Circleville, OH		
Wesley Ebenhack		28620 Ebenhack Rd., Circleville, OH		43113