

November 22, 2022

Ms. Tanowa Troupe, Secretary
Ohio Power Siting Board
Docketing Division
180 East Broad Street, 11th Floor
Columbus, Ohio 43215-3797

Re: Case No. 22-549-EL-BGN

In the Matter of the Application of Oak Run Solar Project, LLC for a Certificate of Environmental Compatibility and Public Need to Construct a Solar-Powered Electric Generation Facility in Madison County, Ohio.

Case No. 22-550-EL-BTX

In the Matter of the Application of Oak Run Solar Project, LLC for a Certificate of Environmental Compatibility and Public Need to Construct a Transmission Line in Madison County, Ohio.

Response to Fifth Data Request from Staff of the Ohio Power Siting Board

Dear Ms. Troupe:

Attached please find Oak Run Solar Project, LLC's ("Applicant") Response to the Fifth Data Request from the staff of the Ohio Power Siting Board ("OPSB Staff"). The Applicant provided this response to OPSB Staff on November 22, 2022.

We are available, at your convenience, to answer any questions you may have.

Respectfully submitted,

/s/ Christine M.T. Pirik

Christine M.T. Pirik (0029759)

Terrence O'Donnell (0074213)

Matthew C. McDonnell (0090164)

Dickinson Wright PLLC

180 E. Broad Street, Suite 3400

Columbus, Ohio 43215

(614) 591-5461

cpirik@dickinsonwright.com

todonnell@dickinsonwright.com

mmcdonnell@dickinsonwright.com

Cc: Mark Bellamy
Theresa White
Randall Schmacher
Jon Pawley
Grant Zeto

Attorneys for Oak Run Solar Project, LLC

Ms. Tanowa Troupe
Oak Run Solar Project, LLC
Case Nos. 22-549-EL-BGN & 22-550-EL-BTX
Page 2

CERTIFICATE OF SERVICE

The Ohio Power Siting Board's e-filing system will electronically serve notice of the filing of this document on the parties referenced in the service list of the docket card who have electronically subscribed to these cases. In addition, the undersigned certifies that a copy of the foregoing document is also being served upon the persons below this 22nd day of November, 2022.

/s/ Christine M.T. Pirik

Christine M.T. Pirik (0029759)

Counsel:

Werner.margard@ohioAGO.gov

Sarah.feldkamp@ohioAGO.gov

Administrative Law Judges:

David.hicks@puco.ohio.gov

4862-9817-9646 v1 [88534-8]

**BEFORE
THE OHIO POWER SITING BOARD**

In the Matter of the Application of Oak Run Solar)
Project, LLC for a Certificate of Environmental)
Compatibility and Public Need to Construct a Solar-) Case No. 22-549-EL-BGN
Powered Electric Generation Facility in Madison)
County, Ohio.)

In the Matter of the Application of Oak Run Solar)
Project, LLC for a Certificate of Environmental) Case No. 22-550-EL-BTX
Compatibility and Public Need to Construct a)
Transmission Line in Madison County, Ohio.)

**OAK RUN SOLAR PROJECT, LLC 'S
RESPONSE TO THE FIFTH DATA REQUEST
FROM THE STAFF OF THE OHIO POWER SITING BOARD**

On September 2, 2022, as supplemented on November 21, 2022, Oak Run Solar Project, LLC (“Applicant”) filed an application (“Application”) with the Ohio Power Siting Board (“OPSB”) proposing to construct a solar-powered electric generation facility in Madison County, Ohio.

On November 9, 2022, the Staff of the OPSB (“OPSB Staff”) provided the Applicant with OPSB Staff’s Fifth Data Request. Now comes the Applicant providing the following response to the Fifth Data Request from the OPSB Staff.

1. **What would be the lengths of each of the two 230-kV lines going from AG1-125 and from AG1-126 to the ‘Main Project Step-Up’ Transformer illustrated in Figure 2-1 of page 28/157?**

Response: The northern 230 kilovolt (“kV”) circuit will be a total of 2.5 miles, the southern 230 kV circuit will be a total of 2.4 miles. The two lines will share common structures (double circuit) for the last 1.3 miles of each circuit.

2. **What poles or structures would be needed to support the lines going from the MV AC collection system to the 230-kV Project substations?**

Response: The 34.5 kV medium voltage (“MV”) collection system will use underground cabling.

3. **Would there be just one conductor used for each phase of the 230-kV lines?**

Response: The 230 kV lines will use one conductor per phase, per circuit. The northern 230 kV line and the southern 230 kV will share common structures (double circuit) for the last 1.3 miles of each circuit. So those structures will carry a total of 6 conductors.

4. **Would some of the 26 steel monopoles for the gen-tie lines be supporting two circuits going from the 230-kV Project step-up substation to the new 765-kV switching station?**

Response: Approximately 1.3 miles of the 230 kV gen-tie's structures will have two circuits, where the northern 230 kV circuit and the southern 230 kV circuit run together into the Project Step-up Transformer.

5. **Please explain or provide a calculation supporting the “857 MVA” and the “1914 MVA” on Figure 2-1, page 28/157 of the Application.**

Response: The conductor chosen for the 230 kV line was 795 Aluminum Conductor Steel Reinforced (“ACSR”) with a continuous operation limit of 1074 Amps. The Figure 2-1 diagram filed with the Application on September 2, 2022, indicates 857 megavolt-amperes (“MVA”) each, which is an error. It should say 857 MVA total, or 428 MVA each, which will be corrected on Figure 2-1.

$$1074 \text{ A} \times \sqrt{3} \times 230 \text{ kV} = 428 \text{ MVA.}$$

The 765 kV connection between the Project Step-up Station and point of interconnection (“POI”) Switchyard will be relatively short. The design limitation was voltage corona rather than thermal or cost. Voltage corona discharge contributes to losses, electromagnetic field (“EMF”) interference and the potential for making cracking or popping noises, which the Applicant is trying to avoid. Using a bundled conductor increases the conductor’s effective geometric mean radius and reduces the potential for ionization. The conductor for the segment was intended to be (4) 556.5 ACSR, but it looks like the Applicant’s consultant used (2) 556.5 ACSR. $2 \times 722\text{A} \times \sqrt{3} \times 765,000\text{V} = 1914 \text{ MVA}$, in the original figure included with the Application. Most of the 765 kV lines in Ohio use four-bundle conductors

and, given the common atmospheric conditions, that should be applied here as well. As such, the thermal rating for this span should be $2 \times 1914 = 3828$ MVA, which will be corrected on Figure 2-1.

These two corrections are included in the attached revised Figure 2.1. Figure 2.1 attached to this response replaces and supersedes Figure 2.1 submitted with the Application on September 2, 2022.

Respectfully submitted,

/s/ Christine M.T. Pirik

Christine M.T. Pirik (0029759)

Terrence O'Donnell (0074213)

Matthew C. McDonnell (0090164)

Dickinson Wright PLLC

180 E. Broad Street, Suite 3400

Columbus, Ohio 43215

(614) 591-5461

cpirik@dickinsonwright.com

todonnell@dickinsonwright.com

mmcdonnell@dickinsonwright.com

Attorneys for Oak Run Solar Project, LLC

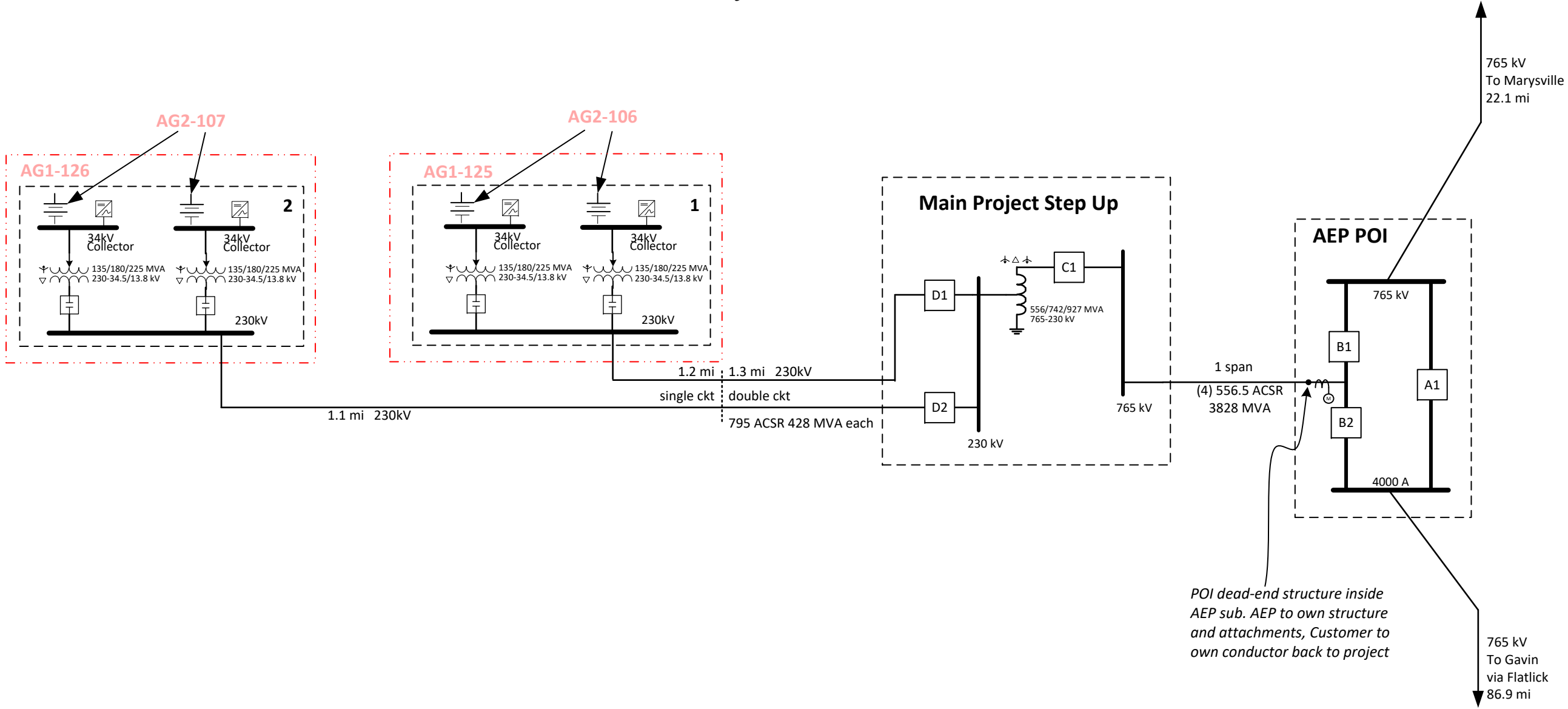
4858-5902-2910 [88534-8]

Attachment 1

Updated Figure 2.1

This figure replaces and supersedes Figure 2.1
submitted with the Application on
September 2, 2022

Oak Run Project Plan



- *The BESS is non-additive and will contribute to the capacity of their corresponding solar projects, not to exceed 400 MW each.*
- *BESS will charge from both solar and from grid.*
- *BESS will share the 34 kV buses with the solar (AC tied) with separate metering. Details on separate SLD page.*

**This foregoing document was electronically filed with the Public Utilities
Commission of Ohio Docketing Information System on**

11/22/2022 4:33:44 PM

in

Case No(s). 22-0549-EL-BGN, 22-0550-EL-BTX

Summary: Response to Fifth Data Request from Staff of the Ohio Power Siting
Board electronically filed by Christine M.T. Pirik on behalf of Oak Run Solar Project,
LLC