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*Via Electronic Filing*

Ms. Tanowa Troupe  
Administration/Docketing  
Ohio Power Siting Board  
180 East Broad Street, 11<sup>th</sup> Floor  
Columbus, Ohio 43215-3793

**Re: Union Ridge Solar, LLC, Case No. 20-1757-EL-BGN**

Dear Ms. Troupe:

Attached for filing in the above referenced case is Union Ridge Solar, LLC's Response to OPSB Staff's Second Data Request.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Dylan F. Borchers

Attachment

Cc: Mark Bellamy (w/Attachment)

## OPSB DATA REQUEST – SECOND SET

### Union Ridge Solar

- 1. Will Union Ridge select a solar panel that is listed as a Bloomberg New Energy Finance tier 1 solar panel supplier/manufacturer?**

Response: Union Ridge Solar intends to install panels that qualify as a Bloomberg New Energy Finance tier 1 panel, per the Q1, 2021 assessment.

- 2. Have the solar panels under consideration by Union Ridge passed the US EPA's Toxicity Characteristic Leaching Procedure (TCLP) test?**

Response: Union Ridge Solar intends to install only panels that are considered safe and that have passed the US EPA TCLP test. We note that many solar panel manufacturers have programs or are developing programs to accept panels back to their manufacturing facility. As indicated in the project's Decommissioning Plan (Exhibit L to the Application), Union Ridge Solar allows for panels to be recycled as part of the decommissioning process.

- 3. What are the MVA levels of the Transformer ONAF cooling and Transformer ONAN cooling in table 5 of the sound study?**

Response: The main power transformer has already been procured as part of Union Ridge Solar's safe harbor strategy and is oversized for this application. This is a custom ABB power transformer with the following ratings:

ONAN 108 MVA

ONAF1 144 MVA

ONAF2 180 MVA (all 36 fans running)

Sound levels were studied for the worst case of ONAF2 with all fans in service. As the project size is approximately 108 MWac we expect to operate mostly in ONAN mode given this climate. ONAN mode has approximately 7 dBA lower sound pressure levels and 14 dBA sound power levels than what was considered in the noise study. This shows that a conservative approach was used with regards to the main power transformer in the noise analysis.

- 4. What is the model and rating of the solar field transformer used for sound propagation model? Also, what is sound power spectra for the solar field transformer?**

Response: The field transformer is included with the inverter, a Power electronics FS3430M. The inverter has a rating of 3430 kVA. The spectrum is not published for the PE FS3430M, so RSG used the spectrum from a Sungrow SG3150U inverter and shifted it to the sound power for the PE unit. The solar field transformer typically has a much lower sound power than the inverter.

5. ***On page 12 of the application it is stated, “The O&M building facilities may potentially include an on-site well and septic system to accommodate normal business office usage.” Will the O&M building have a plumbing system? When it says “may potentially” what are the alternatives?***

Response: The potential on-site well and septic system would include basic plumbing to enable a single-person restroom for the full time Union Ridge Solar employees. Other alternatives to an on-site well and septic could be a public sewer and water or trucking in/out drinking water and waste service.

6. ***Staff recommends an environmental specialist on site during construction activities that may affect sensitive areas, including areas of HDD near surface water resources, and the environmental specialist have authority to stop construction activities for up to 48 hours if the construction activities are creating unforeseen environmental impacts. Is Union Ridge Solar willing to commit to this recommendation?***

Response: Union Ridge Solar is willing to commit to having an environmental specialist on site during construction activities at ecologically sensitive areas.

7. ***Does the project have minimum setbacks from generation equipment to 1) non-participating property lines, 2) non-participating residences, 3) public roads? If so what are the setbacks?***

Response: Per section 4906-4-04(B) of the Application, the setbacks for the Facility are as follows:

25 feet from non-participating properties

100 feet from non-participating sensitive receptors (residence, church, school)

75 feet from the centerlines of public roads

8. ***What is the closest distance from generation equipment to 1) a non-participating property line, 2) a non-participating residence, 3) a public road?***

Response:

Closest distance from a non-participating property line to a PV panel: 25 ft.

Closest distance from a non-participating residence to a PV panel: 133 ft.

Closest distance from a public road to a PV panel: 80 ft.

Per section 4906-4-04(B) of the Application, the setbacks for the Facility are as follows:

25 feet from non-participating properties;

100 feet from non-participating sensitive receptors (residence, church, school); and

75 feet from the centerlines of public roads.

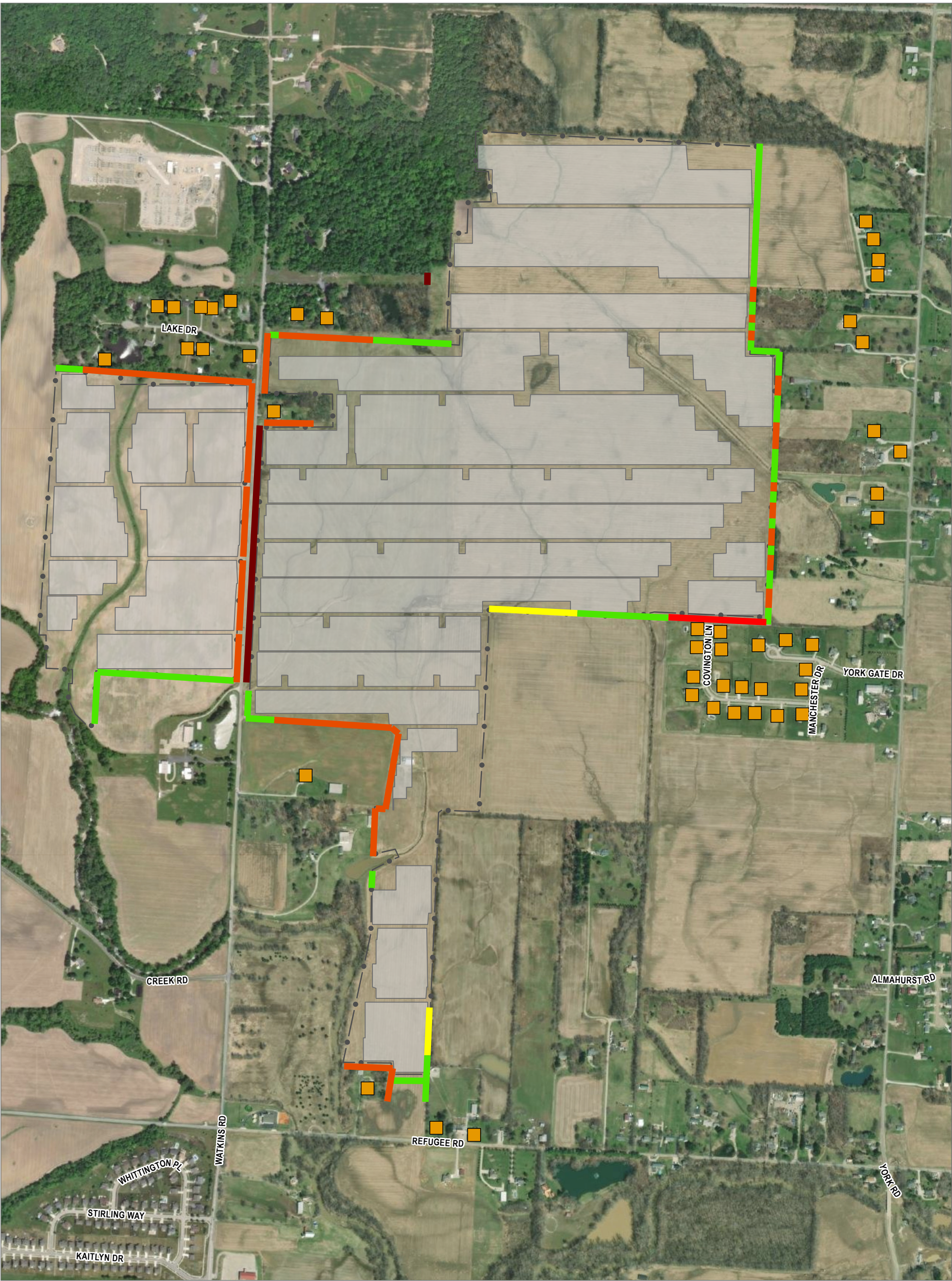
A change in the layout occurred prior to Application submittal to ensure that the setbacks above were met. This change was not reflected in Table 08-2 in the application, where parcels are listed as closer than 25 ft. to a PV Panel. However, the change is reflected in the layout in the Application and in the measurements above. Therefore no panel is closer than 25 feet from a non-participating property line, consistent with the setback standards provided in section 4906-4-04(B) of the Application. Furthermore, as discussed in Appendix B of Exhibit S of the Application, Union Ridge Solar incorporated feedback from local officials and residents in the vicinity of the Project Area to develop a screening plan that is consistent with the needs of the community.

- 9. *Provide a large-scale aerial map that depicts all inhabited residential dwellings adjacent to the project area that have a direct, unobstructed line-of-sight view to the project boundaries. Identify on the map which receptors are participating and nonparticipating, as well as any nearby roads and highways.***

Response: See Appendix A.



Landscape Mitigation and Adjacent Residences with a Direct, Unobstructed Line of Sight



**Union Ridge Solar**  
Harrison Township, Licking County, Ohio

*Landscape Mitigation Plan*

EDR

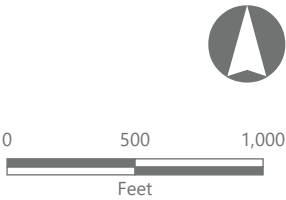
- Mitigation Modules

  - Module 1
  - Module 2
  - Module 3
  - Module 3B
  - Module 3C
- Facility Components

  - Fenceline
  - PV Panel Area

Adjacent Residences with a Direct Line of Sight

  - Non-participating





**This foregoing document was electronically filed with the Public Utilities**

**Commission of Ohio Docketing Information System on**

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**in**

**Case No(s). 20-1757-EL-BGN**

Summary: Response of Union Ridge Solar, LLC to OPSB Staff Second Data Request  
electronically filed by Teresa Orahoud on behalf of Dylan F. Borchers