## COMMONWEALTH OF KENTUCKY

### BEFORE THE ELECTRIC GENERATION AND TRANSMISSION SITING BOARD

In the Matter of:		
ELECTRONIC APPLICATION OF THOROUGHBRED SOLAR, LLC FOR A CERTIFICATE OF CONSTRUCTION FOR	,	
AN APPROXIMATELY 50 MEGAWATT MERCHANT ELECTRIC SOLAR GENERATING FACILITY IN HART	) ) )	Case No. 2022-00115
COUNTY, KENTUCKY PURSUANT TO KRS 278.700 AND 807 KAR 5:110.	)	

# THOROUGHBRED SOLAR, LLC'S RESPONSES TO THE KENTUCKY ELECTRIC GENERATION AND TRANSMISSION SITING BOARD'S FIRST REQUEST FOR INFORMATION

- 1. Submit a copy of the leases or purchase agreements, including options, separate agreements, or deeds which Thoroughbred Solar has entered into in connection with the proposed solar facility, including the agreements for each of the parcels of the project.
  - **RESPONSE:** The executed agreements are provided as Confidential Exhibit A, which has been submitted under seal consistent with Thoroughbred's Motion for Confidential Treatment, which has been filed concurrently herewith.
- 2. Detail any contracts by which Thoroughbred Solar has paid, has negotiated to pay, or any compensation paid to non-participating landowners, whether cash or otherwise, near the project. Include the terms of the agreements and which properties are involved in terms of distance to the project boundaries.

**RESPONSE:** At this time, there are no such contracts.

3. Provide a schedule for the project, starting from the receipt of the proposed certificate for construction to the completion of the project. Include the length of each construction phase.

**RESPONSE:** The current Project construction schedule, including the anticipated length of each construction phase, is set forth in the graphic attached as Exhibit B.

4. Verify whether a power purchase agreement has been made. If so, provide.

**RESPONSE:** At this time, no power purchase agreement has been made.

5. Provide information regarding the gen-tie into the East Kentucky Power Corporation's (EKPC) 69 kV transmission line. Include any requirements EKPC has placed on the project.

**RESPONSE:** Requirements for the large-generator interconnection agreement ("LGIA") will be addressed between the Project and EKPC after the PJM facilities study is completed, which is expected in January 2023. The Project anticipates constructing an approximately 110-foot non-regulated transmission line to tap into EPKC's existing 69 kV overhead line, for which a separate application for a construction certificate will be filed with the Siting Board. The Project has been in communication with EKPC regarding interconnection since shortly after entering the PJM transmission queue in 2020. EKPC representatives and engineering consultants visited the site in August 2021 to assess feasibility and to discuss proposed design with a Project representative on site to answer questions. The Project's approach to siting relative to EKPC infrastructure, drainage, karst geology, available real estate were topics of discussion, as well as an approximate timeline in advance of beginning construction of the facility. EKPC provided feedback on approximate dimensions of the footprint of the proposed facilities detailed in the Site Assessment Report ("SAR") at Section 2.4.2.2 and Figure 11. The Project provided the preliminary geotechnical report (SAR at Attachment C) to EKPC in March 2022. The

- Project coordinated with EKPC most recently to discuss engineering designs provided in the SAR at Section 2.4.2.2 and Figure 11.
- 6. Refer to the Application, SAR at Section 6. Explain whether Thoroughbred Solar will be limiting construction activity to between 7 a.m. and 7 p.m. Monday through Friday as noted for deliveries of construction materials.
  - **RESPONSE:** Delivery of construction materials will occur between 7:00 a.m. and 7:00 p.m. Monday through Friday. General construction activity, however, is anticipated to occur between 7:00 a.m. and 9:00 p.m. Monday through Saturday. Construction will not be conducted on Sundays unless it is necessary to make up for delays or to meet deadlines. Some non-noise-causing and non-construction activities may take place on the site prior to 7:00 a.m.
- 7. Provide a site map that includes all site entrances, substation, panel locations, laydown areas, gen-tie to the EKPC transmission line, and the existing EKPC 69 kV transmission line. Include in the site map a notation regarding entrances to the project that will be used for construction but not operations of the project.
  - **RESPONSE:** The map provided in the attached Exhibit C adds the existing EKPC 69 kV transmission line, the gen-tie to the EKPC, and notations regarding plans for use of the various entrances to Figure 5 from the SAR. Please note that Rowletts Cave Spring Road is not intended for construction delivery or equipment use, and that the limited use construction access off of Johns Lane is intended for construction of the substation/switchyard only.
- 8. Explain any communication with local emergency management regarding security and emergency protocols for the site.

**RESPONSE:** A representative of the Project development team met with the Hart County Sheriff on October 4, 2022 and with the Hart County Office of Emergency Management on November 29, 2022, to provide an overview of the Project and to open lines of communication regarding site safety, security practices, and emergency response. The Project will continue coordinating with local emergency response entities on issues of security and emergency response protocols, although no specific requirements have been identified to date.

- 9. Refer to the SAR, Figure 4. For each of the numbered properties in the map key provide a table listing each of the following.
  - a. The distance to the boundary line.
  - b. The distance to the closest solar panel.
  - c. The distance to the nearest inverter.
  - d. The distance to the substation.

**RESPONSE:** The following table provides the requested information (measuring the distance to the closest point of the entire substation/switchyard area):

Feature	Distance to Boundary Line (feet)	Distance to Closest Solar Panel (feet)	Distance to Nearest Inverter (feet)	Distance to Substation/ Switchyard Area (feet)
1. Hart County Fairgrounds	2,430	2,914	3,343	6,097
2. Battle of the Bridge Historic Preserve	6,803	7,328	7,692	10,196
3. Caveland Country Club	1,696	1,951	2,589	4,496
4. Kingdom Hall of Jehovah's Witness	120	522	782	3,433
5. Rowletts Baptist Church	420	799	1,250	4,050
6. Munfordville First United Methodist Church	9,688	10,214	10,633	13,320

Feature	Distance to Boundary Line (feet)	Distance to Closest Solar Panel (feet)	Distance to Nearest Inverter (feet)	Distance to Substation/ Switchyard Area (feet)
7. Munfordville Church of God	13,839	14,324	14,754	17,471
8. Morning Star Baptist Church	13,016	13,541	13,837	15,991
9. River Pointe Church	11,478	12,001	12,286	14,405
10. Munfordville Church of God	12,445	12,926	13,211	15,163
11. Munfordville Baptist Church	11,430	11,894	12,181	14,093
12. Munfordville Separate Baptist Church	11,024	11,122	11,822	15,641
13. Mount Olivet Church	14,896	15,111	15,963	20,090
14. Cave Spring Church	9,086	9,680	10,549	13,036
15. Cedar Cliff Church	10,900	11,119	11,762	11,445
16. Lonoke Church	10,599	10,823	11,303	13,776
17. Dutch Country Safari Park	2,697	3,048	3,792	5,842
18. Kentucky Down Under	11,565	11,896	12,499	13,267
19. Munfordville Elementary School	9,555	9,835	11,024	13,191
20. Hart County High School	8,307	8,823	9,215	11,811

- 10. For any residential structures within 2,000 feet of the project boundary provide a table listing each of the following.
  - a. The distance to the boundary line.
  - b. The distance to the closest solar panel.
  - c. The distance to the nearest inverter.
  - d. The distance to the nearest inverter.

**RESPONSE:** For purposes of this response, Applicant assumes request No. 10d above intended to request the distance from the substation; as for Response 9, the closest distance to the entire substation/switchyard area has been provided. The attached Exhibit D provides

a key map identifying the requested information relative to both residences within a "Residential neighborhood" as defined in KRS § 278.700(6) and within 2,000 feet but not within a "Residential neighborhood." Note that the closest residences shown within "Residential neighborhood 1" (as shown on Exhibit D) are rental units on property owned by a participating landowner.

- 11. Refer to the SAR, Section 2.4.1.
  - a. Identify the cemetery on the site plan.
  - b. Explain who owns the cemetery and is responsible for its maintenance.
  - c. Explain how access will be provided to the public for the cemetery.

**RESPONSE:** The figure provided in Exhibit C also indicates the location of the cemetery. The small cemetery is on private property owned by the Isaacs family, but predates their ownership. No specific maintenance has been occurring and no additional measures are planned, although the presence of the tree grove surrounding the headstones indicates that farming practices have avoided encroachment into the cemetery. When asked, no member of the Isaacs family was aware of any request for or need for public access to this cemetery. However, the Project layout has similarly avoided encroachment on the tree grove and cemetery, and – as can be seen in Exhibit C – access from Project internal roadways will be readily possible. The Project will facilitate requests for access, if any are received.

12. Refer to the Application, Paragraph 2. Also refer to SAR, Attachment B. Explain the difference between the approximately 626 acres listed in the legal descriptions of the property and the 530-acre site description listed in the Application.

**RESPONSE:** Thoroughbred Solar has established rights over four parcels across three landowner parties, spanning a total of 625.69 acres. However, the Project's development

rights are limited to a portion of the whole of these parcels, described as the "leased premises" on the aforementioned four parcels, totaling approximately 530 acres. For further clarity, Thoroughbred Solar maintains rights over just 90 acres of the 150-acre tract (055-00-00-063.00) owned by Bonnie and David Sammons and just 173 acres of the 208.79-acre tract (056-00-00-040.00) owned by David and Traci Gardner. Therefore, while rights have been established on parcels that total 625.69 acres, 95.79 acres are not permitted for development and have been excluded from the footprint of the Project.

- Provide a map identifying each project property and adjacent property by its APN.RESPONSE: See the attached Exhibit E, which shows the parcel identification.
- 14. State the number of years it will take for planted trees and shrubs to reach mature height.

  RESPONSE: Given the variety of species planned for use in order to optimize screening and landscape value, the growth rates will also vary. As reflected in Section 2.3 of the Landscaping and Lighting Plan (SAR at Attachment I), the illustrations of the proposed planting modules show approximately 10 years of growth; some species may achieve this appearance sooner. Maturity is expected to be achieved within this period for shrubs, grasses, and small trees (both deciduous and evergreen). Larger evergreen and deciduous trees may take another 20 30 years to reach full maturity but will provide visual screening throughout that time, as indicated by the illustrations.
- 15. Describe any other forms of visual barrier that will be implemented between the time of vegetation planting and the time when trees and shrubs will reach mature height.

**RESPONSE:** No other forms of visual barrier are currently planned. Considerable existing vegetation will be retained around the perimeter of the Project Area. In addition, while a period of growth is required for successful establishment of planned landscaping, some

degree of screening will be achieved even with younger plantings. Discussions with nearby landowners will continue throughout the Project development process, and if any specific issues are identified, further enhancements to landscaping could be considered.

16. Describe the plan for maintaining the planted vegetation and replacing dead trees or shrubs throughout project operations.

**RESPONSE:** The Project will prepare a vegetation and maintenance plan, which will be finalized before construction and implemented by operational staff. The plan will comprise all aspects of vegetative maintenance, including replacement of dead trees or shrubs. The Project will work with local partners to establish a schedule for confirming establishment of healthy vegetation growth. Regular monitoring will be undertaken to observe whether adjustments are appropriate during operations, and the complaint resolution process will also allow issues to be reported and addressed, as appropriate.

State whether construction traffic will use US 31W to access smaller roads leading to the
 Project site.

**RESPONSE:** Yes. Construction traffic is expected to use US 31 W to access smaller roads leading to the Project site, and it also may travel to the Project site via the I-65 interchange to the south and north along Route 335. Heavier loads are anticipated to use US 31W.

18. Provide the weight limit ratings for each local roadway to be used by Project construction traffic.

**RESPONSE:** Routes I-65, KY-218, and US-31W are rated for 80,000 pounds (AAA), while KY-335 is rated for 44,000 pounds (A). Local roads that are expected to be used for construction (e.g., G Wilson Lane, Johns Lane) are unrated for weight class.

19. Provide the location and weight limit ratings for any bridges on local roadways to be used by Project construction traffic.

**RESPONSE:** All bridges along roads to be used for construction are unposted and rated in conformance with the highway weight class rating, with the exception of the bridge over the CSX railroad (Route 335), which is posted for a load of 22 tons, consistent with the highway rating of 44,000 pounds.

20. Provide the maximum expected weights for each type of delivery truck, including water trucks.

**RESPONSE:** The Project does not yet know the specific types of delivery trucks its subcontractors will utilize. Delivery of equipment for construction will be on trailers, flatbeds, or other large vehicles. The approximate weight class of the trucks anticipated are reflected in the following table, although the specific construction contractor may use different vehicles.

Gross Vehicle Weight Rating	Weight Class	
6001 – 10,000 lb	Class 2 Trucks	Light Duty
14,001 – 16,000 lb	Class 4 Trucks	Medium Duty
19,501 – 26,000	Class 6 Trucks	Medium Duty
26,001 – 33, 000	Class 7 Trucks	Heavy Duty
Anything above 33,000	Class 8 Tractor-Trailers	Heavy Duty

In addition, the transformer will be the heaviest component of the Project, weighing approximately 56 tons. The Project expects to engage in discussions with local officials regarding use of roads and distribution of weight for transporting this component.

21. Explain whether any oversize or overweight deliveries will require special permits from the Kentucky Department of Transportation or the Hart County Road Department.

**RESPONSE:** Yes, oversized or overweight deliveries associated with Project construction are expected to require permits from the Kentucky Department of Transportation. Coordination with the Hart County Road Department would also be expected.

22. Identify the specific roadways that will be used by heavy trucks, including for delivery of the transformer.

**RESPONSE:** See the response to Request No. 17. Once exiting US 31W, the delivery of the transformer will travel down Route 335 and then onto Johns Lane to reach the substation/switchyard location.

23. Refer to the SAR, Attachment K, Appendix, Figures 1 and 1a. Explain what the numbers in red represent for each roadway.

**RESPONSE:** Figure 1 represents the am/pm traffic counted under existing conditions on each road in each direction, while Figure 1a uses growth factors to project that baseline factor forward to establish a what traffic volumes would be like for the year 2024 without Project-related traffic.

24. Refer to the SAR, Attachment K, Appendix, Figure 2. Explain whether the numbers in red represent the total number of project-related vehicles traveling on each road segment during the construction period on an average day during the peak hour. If so, provide a map containing the number of vehicles on a peak day during the construction phase.

**RESPONSE:** The analysis reflects a peak construction case.

25. Refer to the SAR, Attachment K, Appendix, Figure 2. Explain why no vehicles are indicated on the Rowletts Cave Springs Road when there is a construction entrance proposed in that northwestern portion of the project site.

**RESPONSE:** A Project access drive is located off of Rowletts Cave Spring Road. However, there are no plans to use that entrance during the construction period other than for emergency or incidental use. Therefore, construction traffic was not shown on Rowletts Cave Spring Road.

26. Explain whether construction vehicles or large trucks will need to cross the CSXT railroad line to access the project site during construction. If so, explain whether a crossing agreement with CSXT will be required.

**RESPONSE:** As noted in response to Request No. 19, no direct crossing of the railway would be required. Rather, Route 335 spans the rails via a bridge. Therefore, no agreement with CSXT would be required.

27. Explain the traffic management strategies to be employed during construction.

**RESPONSE:** As noted in the SAR at Section 6.1.2, the Project will coordinate with local officials, observe road conditions prior to construction start, repair roads as necessary, and implement special measures if needed for delivery of larger equipment.

28. Refer to the SAR, Attachment H. Explain how the six observation points (OP) were chosen for the glare analysis.

**RESPONSE:** The observation points and road segments analyzed were selected to conduct modeling for representative locations in different compass directions around the Project Area.

29. Refer to the Application, Exhibit 3. Also refer to the Application, Exhibit 6. Provide any other materials that were distributed to the public during project outreach.

**RESPONSE:** Materials distributed to the public are included in the Application as the Attachment to Exhibit 6, and any further materials are provided in connection with the response to Request No. 30 below.

30. Provide any written communication between project representatives and the public.

**RESPONSE:** See the Application and Exhibit 6 thereto regarding the Project's public involvement program activities. Additional communications are compiled and provided in the attached Confidential Exhibit F, filed under seal consistent with Thoroughbred's Motion for Confidential Treatment filed concurrently herewith. Project representatives have also conducted informal communications at times with local residents via text message, some of which have been maintained and some not. The Project has not provided landowner text message communications as it does not have the permission of the landowners to do so at this time and they generally concerned logistics or other minor issues, as well as personal matters.

31. Describe any issues or concerns noted by the public and the response of Thoroughbred Solar.

**RESPONSE:** Beginning well before the Public Information Meeting held on April 13, 2022, Project representatives have been building relationships in the community and encouraging feedback on any aspect of the Project. Throughout this time, it has received and provided answers to residents' questions about solar and renewable energy in general, the Project, tax impacts, and the permitting process. Most of these inquiries were informational and not to raise any concern or issue. There have been some issues and concerns raised. These fall into the general categories of (1) a concern by adjacent landowner Mick Lawler about the proximity of the substation in preliminary Project

designs to his cabin. The Project took Mr. Lawler's concern and refined the Substation footprint to provide an enhanced setback of the substation from the cabin, which continues to be well set back from other residences. Issues have also been raised regarding certain potential environmental impacts, as noted in the public comment filed by Paul Hawkins on October 13, 2022. Mr. Hawkins raised several concerns about potential for drainage issues to arise relative to the leased parcels coming out the CREP. Additionally, members of the Berger family raised several concerns in the public comments in October 2022 and with Project representatives, including possible property value impacts and the location of certain elements of the site plan. In response, Project representatives met with the Berger family on November 18, 2022, and the Project is currently reviewing ways to address these concerns.

32. Explain any plans to coordinate with local landowners with issues during construction of the project or operations.

**RESPONSE:** As discussed in the SAR at Section 5, the Project will provide notification to abutting landowners prior to the start of construction, and a complaint resolution process will be publicized to allow for community feedback and response to specific issues of concern as they may arise. Following the filing of the permit application in October, the Project mailed a newsletter to abutting landowners apprising them of information pertinent to the Project, and the newsletter will be utilized periodically throughout the construction effort to communicate with abutting landowners. Additionally, the Project expects to provide at least 7 days' notice prior to the start of construction to abutting landowners.

33. Provide a list of permits from other local, state, or federal agencies that have been or will be obtained prior to construction or operations.

## **<u>RESPONSE</u>**: The list of anticipated permits required is provided in the table below:

Agency	Permit/Approval	Туре	Notes
Federal Review/Appr	ovals		
US Fish and Wildlife Service (USFWS)	Endangered Species Act Section 7 Consultation; or Section 10 /Incidental Take Permit	Pre-Construction	Initial consultation completed.
Federal Aviation Administration (FAA)	Notice of Proposed Construction or Alteration	Pre-Construction	Determination of No Hazard received.
<b>State Approvals</b>			
Kentucky Electric Generation and Transmission Siting Board	Certificate of Construction of an electric generating facility	Pre-Construction	Review in process.
Kentucky Energy and Environment Cabinet - Division of Water, Bowling Green Regional Office	KPDES Construction General Permit KYR100000	Pre-Construction	Pending final design.
Kentucky Energy and Environment Cabinet - Division of Water	Water/Monitoring Well Reporting Record Form	Pre-Construction	Pending final design.
Kentucky Department of Fish and Wildlife Resources and Office of Kentucky Nature Preservers	Threatened and Endangered Species Review	Pre-Construction	Initial consultation completed.
Kentucky Transportation Cabinet	Driveway Encroachment Permit from a State Highway	Construction	Pending final design.
Kentucky Transportation Cabinet	Special Hauling Permit for State Highways	Construction	For oversized or overweight loads.
<b>Local Approvals</b>			
Hart County (Transportation Department)	Roadway use and Maintenance Agreement (RUMA)	Pre-Construction	Early consultation in process.

Hart County (Transportation Department)	Driveway Permit from a County Roadway	Either Pre- Construction or Construction	Pending final design
Hart County (Building and Electrical Department)	Electrical Permit	Construction	Building permit for O&M building.
Hart County Health Department	Septic System Approval	Construction	Pending final design.
Hart County Tax Administrators Office	Hart County Occupational License	Pre-Construction	Pending final design.

34. Describe the different sources of ambient noise at different locations surrounding the Project site.

**RESPONSE:** Background sound level monitoring was performed around the Project Area by Acentech in November 2021. Monitoring was performed for short durations at four locations and a longer duration (a total of five days) at a single location. The long-term monitor ("LM-1") was located near the location of the proposed substation/switchyard, and the short-term measurement locations ("SM") were distributed around the Project Area. SM-1 was to the northwest in the vicinity of Rowletts Cave Spring Road, SM-2 was to the northeast (also along Rowletts Cave Spring Road), SM-3 was in the vicinity of the church located on Route 335, and SM-4 was along G Wilson Road to the southwest of the Project Area. Generally, ambient sound sources in these locations were dominated by transportation sounds, particularly as locations were closer to I-65. This generally led to higher measured background sound levels in the western portions of the Project Area.

35. Provide estimates of ambient noise levels, during the daytime and during nighttime at different locations surrounding the project site.

**RESPONSE:** Overall, sound levels varied by location and time-of-day. At LM-1, the hourly Leq ranged from about 38 to 62 dBA during the day and 40 to 68 dBA at night. The L90 (the sound level exceeded 90 percent of the time), ranged from 34 to 50 dBA during the day and 33 to 45 dBA at night. The short-term locations showed midday Leqs between 51 and 59 dBA and midday L90s between 47 and 59 dBA. Results for early morning were generally a bit lower. Nighttime Leqs range from 41 to 55 dBA and L90s ranged from 38 to 50 dBA. Lower levels were generally measured in the eastern part of the Project Area and higher levels in the western part of the Project Area, closer to Interstate 65. Measurements at short-term locations were five minutes long.

- 36. Refer to the SAR, Attachment G, Table 3, page 11.
  - Explain whether the small pile driver listed in the table is the size that

    Thoroughbred Solar will use during construction. If not, provide sound pressure
    levels of the type of pile drivers Thoroughbred Solar intends to use during
    construction.
  - b. Explain the meaning of "HDD."

**RESPONSE:** Yes, the small pile driver listed is the size typically used for this type of construction and that is anticipated for use during construction on the Project. "HDD" stands for "horizontal directional drilling," a form of installing underground conduits without the need for open trenching. At this site, this technique is optional, but not anticipated to be a frequent use. No stream crossings (which is a typical use for this technique) are proposed.

37. Refer to the SAR, Attachment G, Table 4, page 12. Provide an update to Table 4 with estimated sound pressure levels at 1,500 feet (dBA).

**RESPONSE:** Updated tables are provided below. Please note that these are typical representative values, and that the nature of construction has the potential to vary.

**Updated Table 3: Representative Sound Levels from Construction Equipment** 

Equipment	Sound Pressure Level at 50 feet (dBA)	Sound Pressure Level at 280 feet (dBA)	Sound Pressure Level at 1,500 feet (dBA)	Distance to 55 dBA (ft)
Excavator	76	61	46	561
Dozer	80	65	5	889
Grader	78	63	48	706
Roller	82	67	52	1,119
Dump Truck	82	67	52	1,119
Concrete Mixing Truck	81	66	51	998
Concrete Pumper Truck	84	69	54	1,409
Man-lift	72	57	42	354
Flatbed Truck	74	59	44	446
Crane (2)	74	59	44	446
Trencher	83	68	53	1,256
Plate Compactor	75	60	45	500
Forklift (2)	88	73	58	2,233
Boom Truck	88	73	58	2,233
Small Pile Driver	84	69	54	1,409
HDD	87	72	57	1,991
Skid Steer (2)	79	64	49	792
Diesel Generator	67	52	37	199
Rock Drill	92	77	62	3,342

**Updated Table 4: Representative Sound Levels from Construction by Phase** 

Construction Phase <sup>[1]</sup>	Equipment	Sound Pressure Level at 50 feet (dBA)	Sound Pressure Level at 280 feet (dBA)	Sound Pressure Level at 1,500 feet (dBA	Distance to 55 dBA (ft)
Road Construction	Excavator, Dozer, Grader, Roller, Dump Truck	87	72	58	2,027
Substation Construction	Excavator, Dozer, Grader, Roller, Dump Truck, Concrete Mixing Truck, Concrete Pumper Truck, Man-lift, Flatbed Truck, Crane (2)	90	75	60	2,759
Trenching	Excavator, Dozer, Trencher, Roller, Compactor, Flatbed Truck, Forklift,	91	76	61	3,061
Inverter Construction	Excavator, Dozer, Grader, Roller, Dump Truck, Concrete Mixing Truck, Concrete Pumping Truck	90	75	60	2,663
Piling	Flatbed Truck, Boom Truck, Pile Driver	90	75	60	2,678
Racking	Flatbed Truck (2), Forklift (2)	91	76	62	3,221
Laydown Area	Forklift (2), Skid Steer (2), Flatbed Truck, Diesel Generator	89	74	59	2,420
Boring	Horizontal Bore Drill, Excavator	87	72	58	2,068
Rock Drilling	Rock Drill	92	77	62	3,342

The analysis is conservative because the sound levels and distances shown here assume that all sources will be operating simultaneously and in their loudest state.

- 38. Refer to the SAR, Attachment G, Appendix C, Figure 6, page 21 and Figure 7, page 22.
  - a. Provide updates to Figures 6 and 7 with a contour line illustrating noise receptors experiencing maximum sound pressure levels greater than 55 dBA within 1,500 feet of the nearest construction activity.
  - For noise receptors experiencing maximum sound pressure levels greater than 55
     dBA during construction activity, explain the sound mitigation measures that
     Thoroughbred Solar will employ.

**RESPONSE:** Contour lines representing construction cannot meaningfully be determined or shown, given the manner in which various construction activities will move across the Project Area. In order to address this issue, a column was added to Updated Table 3 to indicate the distance at which each activity/piece of equipment is expected to result in sound levels of 55 dBA. Updated Table 4 was similarly revised to include a column indicating the distance at which sound levels from those collective activities would be expected to be 55 dBA.

In addition to limiting construction to prescribed hours, the following best management construction practices will be implemented to reduce construction noise levels at noise-sensitive locations:

- Construction equipment fitted with exhaust systems and mufflers that have the lowest associated noise whenever those features are available;
- Maintaining equipment and surface irregularities on construction sites to prevent unnecessary noise;

- Configuring the construction in a manner that keeps loud equipment and activities
  as far as possible from noise-sensitive locations to the extent feasible;
- Using back-up alarms with a minimum increment above the background sound level to satisfy the performance requirements of the current revisions of Standard Automotive Engineering and Occupational Safety and Health Administration ("OSHA") requirements;
- Locating equipment and material staging areas away from sensitive receptors
   when feasible: and
- Requiring contractors to use approved haul routes to minimize noise at residential and other sensitive noise receptor sites.

Please note that the intermittent nature of noise during construction and the limited duration of construction are also factors in minimizing potential community disruption. Additionally, the complaint resolution process, which will be made available to the public and local officials prior to construction, will include a process for addressing complaints received during both construction and operation of the Project, including potential complaints related to noise.

39. Refer to the SAR, Attachment G, page 13. Confirm that the statements, "Modeled sound levels at the worst-case residence are 41 dBA for both the daytime and nighttime," and, "Modeled sound levels were at least 4 to 9 dB below design goal sound level thresholds at all homes surrounding the Project," refer to the operational phase of the project and not the construction phase.

**RESPONSE:** Yes, these statements refer to the operational phase.

- 40. The proposed project borders the Green River Conservation Reserve Enhancement Program ("CREP") established by the United States Department of Agriculture ("USDA"). State whether the properties to be used for the project currently participate in the Green River CREP. If the properties are not participating in the Green River CREP, provide information regarding why the project area does not qualify to be part of the Green River CREP.
  - **RESPONSE:** A portion of the Project Area has participated in the Green River CREP program; however, this program ends in 2023. A conversation with the USDA Farm Service Agency of Hart County confirmed the program has been discontinued.
- 41. Provide any communication Thoroughbred Solar has engaged in with the National Park Service and the Kentucky Department of Fish and Wildlife regarding the project and its proximity to the Green River CREP.
  - **RESPONSE:** Communication with the Kentucky Energy and Environment Cabinet, Office of Kentucky Nature Preserves, and USFWS did not identify proximity to the Green River CREP as an issue for the Project Area. No other specific communication has occurred with the National Park Service or Kentucky Department of Fish and Wildlife.
- 42. Provide a hydrological survey related to the drainage within and surrounding the project area.
  - **RESPONSE:** Please see the SAR at Attachment M for a hydrological analysis related to drainage.
- 43. Refer to the SAR, Attachment D, Appendix A, Terracon Geophysical Exploration Report, page 2. The report recommended, "direct exploration at the geophysical anomaly locations

to better characterize the risk." Provide an update on when this exploration will be completed.

**RESPONSE:** As referenced in Attachment D to the SAR (Section 5), the Project anticipates completing this work prior to bidding engineering, procurement, and construction services and prior to completing the final design so that it can design appropriate foundations.

44. Refer to the Application, Attachment A, Sheet C300. Also refer to the Application, Exhibit 12, Attachment E, Figures 1-4. Explain why the study area of the wetland delineation report does not match the project layout in Sheet C300.

**RESPONSE:** Attachment E includes two documents, the Wetland and Stream Delineation Report completed in February 2022 and the Wetland and Stream Delineation Report Addendum completed in August 2022). The initial report was supplemented (as reflected in the Addendum) to include the balance of the Project Area.

- 45. Refer to the SAR, Attachment D, Attachment B, Preliminary Karst Evaluation, Summary. It was recommended that Thoroughbred Solar, "avoid placing foundations within karst or sinkhole areas, to the extent possible, and/or to plan for appropriate remediation."
  - a. Explain the proposed setbacks from kart formations or sinkholes.
  - b. Explain the proposed remediation for karst formations.
  - c. Explain whether Thoroughbred Solar has contingency plans for the substation location if kart remediation is necessary in the proposed location.

#### **RESPONSE:**

a. Setbacks have been and will be maintained from the observed rim of actual sinkholes within the Project Area of at least 100 feet, with the exception of one depression;

for this location, which has reportedly been excavated by the landowner to be larger than the sinkhole itself considerably smaller (the setback to this feature is 40 feet). It is not appropriate to establish a uniform setback from the lesser depressions within the Project Area at this time given the variation and fact that some depressions are extremely minor. As is appropriate for each structure and foundation requirements, karst features will be avoided, mitigated, or monitored in order to provide for appropriate foundations within this karst setting. The ultimate plan will be informed by the additional geotechnical or geophysical efforts that will be completed prior to final design, and construction processes will also allow for further refinement as necessary.

- b. The Project will follow the typical karst procedure remediation established in the state of Kentucky, which is the "Reverse Filter Remediation for open sinkhole." This method is intended to maintain the drainage path with no hydraulic changes to the location, and is depicted for various conditions in Kentucky Department of Highways Standard Drawing No. BGX-018.
- c. There are no current plans to adjust the substation location based on karst conditions, as numerous options are available that would allow for adequate structural support without adversely influencing subsurface conditions. First, if a karst feature "sinkhole" was encountered in the substation area, sinkhole remediation may be implemented as noted above. Second, the typical engineering practice for substation foundation in an area prone to sinkholes is the use of "drilled shaft/pier/deep pile foundations," in which shafts/piers will be drilled to bear on a competent rock, bypassing the weaker soil zone/layer, if any. Additionally, the Project is in communication with EKPC. Given their familiarity with building in this region, including the existing electric

transmission pole that traverse the Project Area, their input will continue to be sought as final design is developed. Final engineering plans and final construction procedures will be developed prior to construction in consultation with karst-focused resources and guidelines and local experts.

46. Refer to the SAR, Attachment D, Appendix A, Geological Survey Plan created by Terracon. Explain what the dark blue circular features signify that are within the Public LiDAR Closed Depressions.

**RESPONSE:** The dark blue circular features represent the mapped lowest elevation points within each mapped closed depression based on the publicly available LiDAR data.

47. Provide the stormwater management plan for construction and operations.

**RESPONSE**: Please see the SAR at Attachment M.

48. There are existing cave systems near the project; Mammoth Cave National Park, 5 miles west of the project boundary; Mammoth Onyx Cave, 1.5 miles south of the project boundary; and, Hidden River Cave, 3.5 miles south. Explain how hydrological drainage into the existing cave systems will be prevented.

**RESPONSE:** With the exception of the substation area, foundations will be shallow slabs or driven piles within the immediate surface only, and void management will occur to avoid creation of new drainage conduits. The deep piles likely to be used for substation support will be anchored into rock and will also avoid creation of additional conduits. During the construction phase of the Project, drainage within the site will be managed in accordance with an Erosion and Sedimentation Control plan consistent with the Kentucky construction general permit. None of the Project construction or operational activities are anticipated to impact the deeper hydrologic network. Finally, the Project site will experience the same or

improved drainage after completion because the planned vegetative ground cover enhances water management over row crop uses. No adverse effect on hydrological drainage within the cave systems is, therefore, expected.

49. Provide information about existing or proposed utilities that will be necessary for construction or operation of the project.

**RESPONSE:** Information about existing and proposed utilities is provided in the SAR at Sections 2.6 and 2.4.2.1.5. During construction, electricity, internet, and telephone service may be required, while sanitary services are expected to be provided using portable facilities. Once the Project is operational, it is expected that the O&M building will be connected to local electrical, internet, and/or telephone services. Lighting requirements at the Project will be met via the connection to local electrical services as well. As noted in the SAR, a well and septic system may be installed to meet the O&M building's need for sanitary services and/or landscape watering.

50. Provide the estimated total capital cost of the Thoroughbred Solar project.

**RESPONSE:** The estimated total capital cost of the Project has been provided in Confidential Exhibit G, which has been filed under seal consistent with Thoroughbred's Motion for Confidential Treatment filed concurrently herewith.

51. Refer to Exhibit 10, Table 3, page 10. Confirm that the total project construction related spending in Kentucky is \$12.5 million, including labor.

**RESPONSE:** The economic analysis uses industry standard estimate for a project of this size, and is expected to be reflective of Project benefit, although actual values will be dependent upon market conditions at the time of construction, as well as supply chain and similar factors.

- 52. Refer to Exhibit 10, Table 3, page 10. Confirm that the total project construction-related spending on materials, supplies and other items in Kentucky is approximately \$1.4 million.

  RESPONSE: The economic analysis uses industry standard estimate for a project of this size, and is expected to be reflective of Project benefit, although actual values will be dependent upon market conditions at the time of construction, as well as supply chain and similar factors.
- 53. Refer to Exhibit 10, Table 3, page 10. Clarify whether the 141 jobs generated during the construction phase are full-time jobs.
  - **RESPONSE:** Employment "jobs" refers to a mix of full-time, part-time, and seasonal positions. It is expressed in terms of full-time equivalents ("FTEs"). Please see the definition in Table 1.
- 54. Refer to Exhibit 10, Table 3, page 10. Identify how many of the 141 jobs generated in Kentucky during construction would be filled by Hart County residents.
  - **RESPONSE:** The Project's intent is to hire qualified workers, and the Project is open and amenable to hiring as many Hart County residents as appropriate for the Project needs. The Applicant recognizes the value in construction workers being able to obtain work closer to home when possible.
- 55. Provide the approximate salary or wages for full-time jobs during the construction phase of the project.
  - **RESPONSE:** Wages range depending upon prevailing wages in the area for specific services, but are typically \$18 \$50 per hour. Based on the applicable skill or trade, salaries can range from approximately \$50,000 \$150,000 per year.
- 56. Describe the jobs that will be necessary during the operations phase of the project.

**RESPONSE:** During the operations phase, the Project anticipates positions in management and staffing of the O&M building. Additionally, the Project expects to engage contractors to provide other services as needed at the site, including but not limited grounds and vegetation maintenance.

- 57. Refer to Exhibit 10, Table 4, page 4. Confirm that the total project operations spending in Kentucky would be approximately \$393,000 per year.
  - **RESPONSE:** The economic analysis uses industry standard estimate for a project of this size, and is expected to be reflective of Project benefit, although actual values will be dependent on market conditions at the time of construction, as well as supply chain and similar factors.
- 58. Explain whether Thoroughbred Solar intends to pursue an Industrial Revenue Bond (IRB) and a Payment In Lieu Of Taxes (PILOT) Agreement with [Hart] County. If yes, explain whether the IRB and PILOT Agreement will change the government revenue impact.
  - **RESPONSE:** Yes, the Project intends to pursue an IRB and/or PILOT. Discussions with the Hart County Judge/Executive have been initiated but are in early stages. The Applicant plans to share its analysis of the IRB with county officials to assess interest in using this framework to more flexibility take advantage of the increased revenue from the proposed property improvements. These discussions will guide the resulting changes to government revenue impact.
- 59. Explain any commitments for land restoration included in the landowner lease agreements.

  RESPONSE: Land restoration commitments that are included in the landowner lease agreement (provided as Exhibit A) are:

- Removal of Improvements (clause 6(e)) This obligates the Applicant to remove Project structures and restore the property to "substantially the same physical condition," while allowing for certain elements to remain based on landowner preferences. This includes provisions consistent with the Project's Decommissioning Plan, and also assures the Applicant the right of access to complete restoration activities.
- Roadway Maintenance and Repairs (clause 9(g)) This specifies that roadways
  located on lessee property will be maintained and repaired by the Applicant, unless
  the need for repair is caused by the landowner; in such a case, details of the remedy
  are specified.
- Drain Tile or Irrigation System Damage (clause I, subsection ii) This obligates the landowner to provide information regarding the location of any tile lines or irrigation systems within the Project Area, and obligates the Application to take commercially reasonable steps to avoid damage to such features. Repair, replacement, or rerouting, as necessary, as well as opportunities for landowner review of systems prior to backfill are also covered in this provision.

Respectfully submitted,

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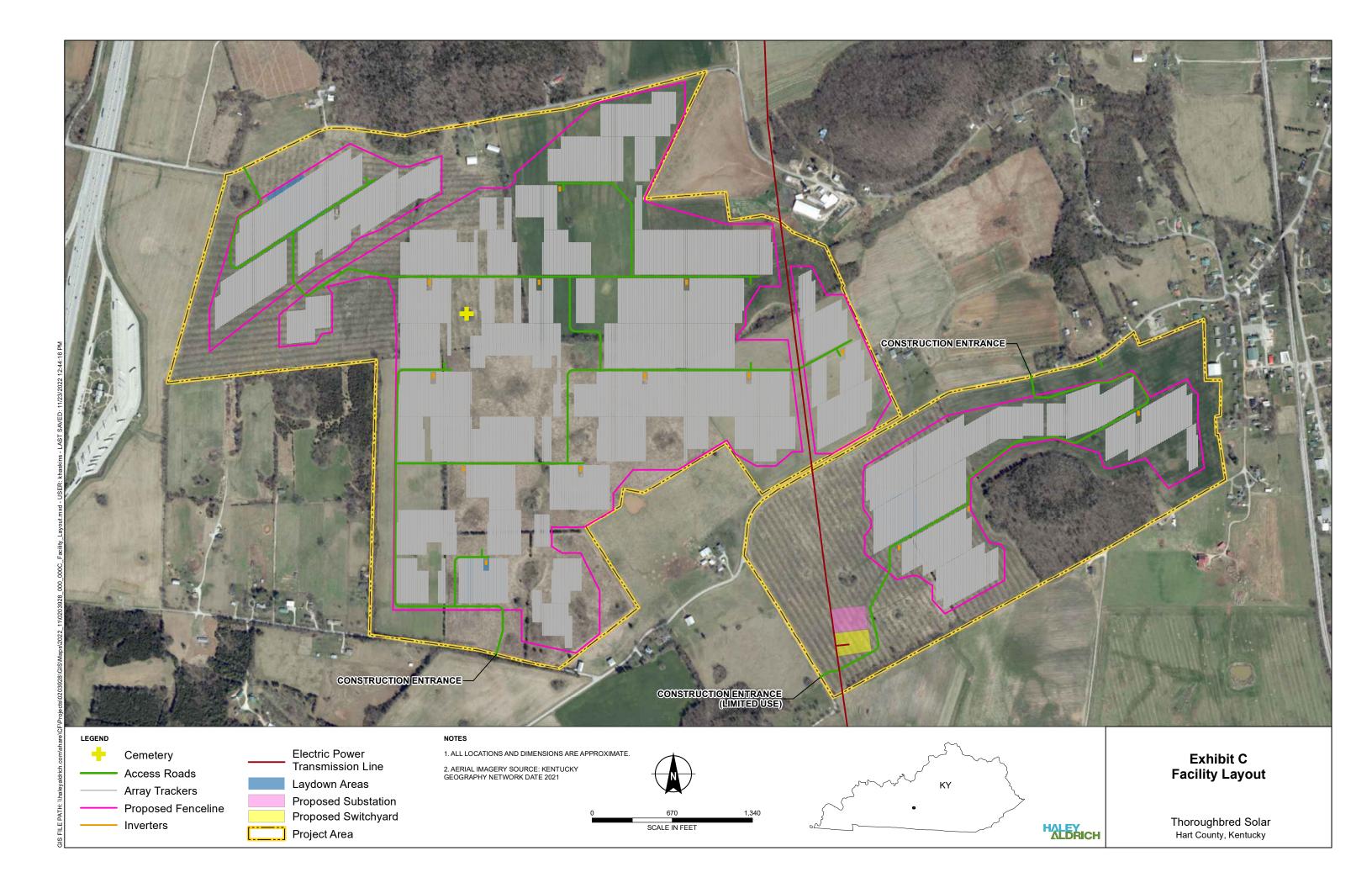
Counsel for Thoroughbred Solar, LLC

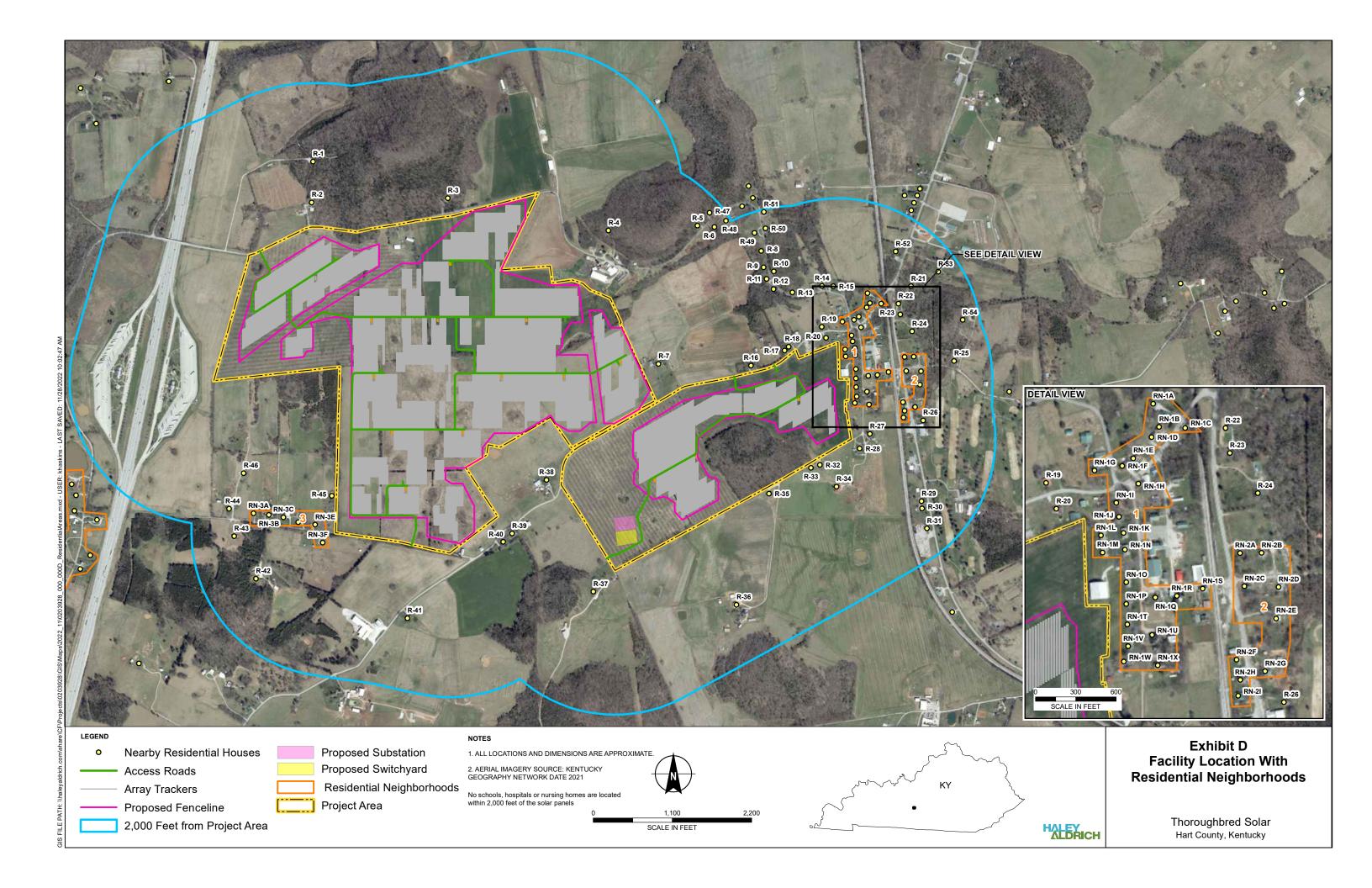
## **Thoroughbred Solar Post-Certificate Schedule**



	2023		2024			2025		
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Construction Certificate	$\overline{\mathbf{A}}$							
Interconnection Agreement								
Power Marketing/PPA								
Advanced Geotechnical								
EPC Bidding & Procurement								
Notice to Proceed (NTP)			$\overline{\mathbf{V}}$					
Site Preparation								
EKPC Substation Construction								
Racking & Panel Installation								
Complete Construction & Testing								
Commercial Operation								$\checkmark$

Confidential





Distance from Residences within 2,000 Feet of Project Area to Specific Project Features

			ject Area to Specifi	
Residence Number	Distance to Boundary Line (feet)	Distance to Nearest Inverter (feet)	Distance to Nearest Solar Panel (feet)	Distance to Substation/ Switchyard Area (feet)
R-1	910	2,330	1,093	6,458
R-2	340	1,814	539	6,047
R-3	248	895	427	4,984
R-4	815	1,671	921	3,959
R-5	1,577	2,157	1,801	4,109
R-6	1,752	2,265	1,948	4,147
R-7	249	520	347	2,122
R-8	1,454	2,107	1,815	4,069
R-9	1,226	1,875	1,584	3,877
R-10	1,131	1,792	1,499	3,899
R-11	1,065	1,713	1,421	3,758
R-12	897	1,551	1,259	3,685
R-13	798	1,468	1,177	3,792
R-14	814	1,588	1,319	4,114
R-15	782	1,622	1,328	4,210
R-16	96	799	314	2,633
R-17	91	688	399	3,096
R-18	97	726	433	3,173
R-19	283	1,036	765	3,689
R-20	118	914	608	3,626
R-21	1,282	2,196	1,762	4,988
R-22	997	1,899	1,462	4,697
R-23	949	1,820	1,375	4,627
R-24	1,042	1,819	1,365	4,626
R-25	1,490	2,210	1,746	4,931
R-26	1,027	1,742	1,231	4,224
R-27	270	1,088	495	3,465
R-28	179	1,076	426	3,269
R-29	1,304	2,202	1,550	3,978
R-30	1,378	2,273	1,621	3,975
R-31	1,625	2,510	1,860	4,016
R-32	93	942	450	2,675
R-33	66	952	536	2,544
R-34	472	1,308	740	2,843
R-35	89	1,117	763	1,900
R-36	1,227	2,054	1,433	1,619
R-37	418	1,748	1,585	714
R-38	205	1,327	776	1,059
R-39	314	1,544	764	1,420

Residence Number	Distance to Boundary Line (feet)	Distance to Nearest Inverter (feet)	Distance to Nearest Solar Panel (feet)	Distance to Substation/ Switchyard Area (feet)
R-40	329	1,528	639	1,557
R-41	1,009	1,777	1,253	3,072
R-42	1,274	2,409	1,611	5,024
R-43	1,405	2,459	1,663	5,266
R-44	1,483	2,459	1,704	5,333
R-45	63	1,023	279	3,917
R-46	1,294	2,126	1,502	5,166
R-47	1,820	2,396	2,046	4,323
R-48	1,934	2,430	2,122	4,277
R-49	1,719	2,371	2,077	4,255
R-50	1,737	2,399	2,106	4,376
R-51	1,963	2,626	2,333	4,575
R-52	1,496	2,435	2,040	5,155
R-53	1,703	2,606	2,165	5,406
R-54	1,763	2,516	2,054	5,308
Potential Resid	ential Neighborhood	l 1		
RN-1A	796	1,735	1,346	4,469
RN-1B	705	1,643	1,240	4,402
RN-1C	807	1,735	1,315	4,514
RN-1D	629	1,567	1,165	4,328
RN-1E	464	1,403	1,005	4,164
RN-1F	389	1,328	937	4,085
RN-1G	295	1,218	859	3,946
RN-1H	385	1,304	887	4,089
RN-1I	215	1,133	724	3,917
RN-1J	209	1,082	660	3,877
RN-1K	233	1,036	600	3,841
RN-1L	98	929	512	3,725
RN-1M	105	866	432	3,672
RN-1N	239	979	532	3,789
RN-1O	173	884	428	3,687
RN-1P	106	832	366	3,617
RN-1Q	282	1,007	541	3,783
RN-1R	410	1,132	667	3,899
RN-1S	567	1,290	825	4,053
RN-1T	115	807	352	3,561
RN-1U	262	943	498	3,659
RN-1V	122	798	350	3,504
RN-1W	103	772	301	3,438
RN-1X	302	974	495	3,608

Residence Number	Distance to Boundary Line (feet)	Distance to Nearest Inverter (feet)	Distance to Nearest Solar Panel (feet)	Distance to Substation/ Switchyard Area (feet)
Potential Resid	ential Neighborhood	12		
RN-2A	840	1,569	1,104	4,350
RN-2B	960	1,689	1,223	4,461
RN-2C	814	1,533	1,069	4,277
RN-2D	1,015	1,730	1,268	4,455
RN-2E	996	1,685	1,234	4,363
RN-2F	764	1,439	961	4,049
RN-2G	939	1,612	1,123	4,182
RN-2H	794	1,469	974	4,026
RN-2I	767	1,469	961	3,981
Potential Resid	ential Neighborhood	13		
RN-3A	1,143	2,131	1,365	4,993
RN-3B	929	1,924	1,152	4,779
RN-3C	726	1,732	951	4,577
RN-3D	519	1,551	755	4,372
RN-3E	284	1,340	534	4,139
RN-3F	225	1,359	575	4,048

