

COMMONWEALTH OF KENTUCKY
BEFORE THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION
AND TRANSMISSION SITING

In the Matter of:

ELECTRONIC APPLICATION OF SUMMER)	
SHADE SOLAR, LLC FOR A CERTIFICATE)	
OF CONSTRUCTION FOR AN)	
APPROXIMATELY 106-MEGAWATT)	CASE NO.
MERCHANT ELECTRIC SOLAR)	2025-00064
GENERATING FACILITY IN METCALFE)	
COUNTY, KENTUCKY PURSUANT TO)	
KRS 278.700 AND 807 KAR 5:110)	

SITING BOARD STAFF'S FIRST REQUEST FOR INFORMATION
TO SUMMER SHADE SOLAR, LLC

Summer Shade Solar, LLC (Summer Shade), pursuant to 807 KAR 5:001, shall file with the Commission an electronic version of the following information. The information requested is due on June 26, 2025. The Siting Board directs Summer Shade to the Kentucky Public Service Commission's July 22, 2021 Order in Case No. 2020-00085¹ regarding filings with the Commission. Electronic documents shall be in portable document format (PDF), shall be searchable, and shall be appropriately bookmarked.

Each response shall include the question to which the response is made and shall include the name of the witness responsible for responding to the questions related to the information provided. Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association or a

¹ Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (Ky. PSC July 22, 2021), Order (in which the Commission ordered that for case filings made on and after March 16, 2020, filers are NOT required to file the original physical copies of the filings required by 807 KAR 5:001, Section 8).

governmental agency, be accompanied by a signed certification of the preparer or the person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

Summer Shade shall make timely amendment to any prior response if Summer Shade obtains information that indicates the response was incorrect or incomplete when made or, though correct or complete when made, is now incorrect or incomplete in any material respect.

For any request to which Summer Shade fails or refuses to furnish all or part of the requested information, Summer Shade shall provide a written explanation of the specific grounds for its failure to completely and precisely respond.

Careful attention shall be given to copied or scanned material to ensure that it is legible. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request. When applicable, the requested information shall be separately provided for total company operations and jurisdictional operations. When filing a paper containing personal information, Summer Shade shall, in accordance with 807 KAR 5:001, Section 4(10), encrypt or redact the paper so that personal information cannot be read.

1. Submit a copy of the lease or purchase agreements, including options, separate agreements, or deeds which Summer Shade has entered into in connection with the proposed solar facility, including the agreements for each of the parcels of the project.

2. Detail any contracts by which Summer Shade 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.

3. Explain whether construction activities will occur sequentially or concurrently across the project site.

4. Explain why Summer Shade has chosen a site with so many non-contiguous parcels.

5. Explain how a non-contiguous Project site can be developed and function as a single integrated Project.

6. Explain how power generated within the non-contiguous portions of the Project site will be delivered to the substation.

7. Provide a one-page site map that contains the locations of water features, including rivers, streams, lakes, and ponds. Also include any known or suspected karst features.

8. List all churches or other religious facilities within a two-mile radius of the project. Provide the corresponding distances from the facility to the closest site boundary.

9. Provide any communication with any churches or other religious facilities regarding the project. Describe any concerns that were raised.

10. Provide any historic or archeologic studies that have been planned or completed for the project site.

11. Provide any communication that has occurred with any schools within a two miles radius of the project. Describe any concerns that were raised.

12. Provide a narrative description of the location of each of the following site features:

- a. Each construction entrance.
- b. Each entrance to be used in operations.
- c. Operating & Maintenance area.
- d. Meteorological station.

13. Provide what time of day construction, operation and maintenance activities will begin and end each day.

14. Provide a narrative description of the location of each laydown area to be used during construction.

15. Provide the security measures for the operations and maintenance (O&M) area and substation.

16. Explain how Summer Shade will coordinate with local enforcement and fire services regarding security and emergency protocols during construction and operations.

17. Provide any communication with local emergency services on security and emergency protocols during construction and operations. If contact has not been made, explain when that contact will occur.

18. Provide a detailed table listing all residential structures located within 2,000 square feet of the Project boundary line. The table must state the distance measurement in feet (not meters) for each structure, listed below:

- 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.

19. Provide a detailed table listing all non-residential structures located within 2,000 feet of the Project boundary line. For each structure, provide:

- 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.

20. Clarify whether any existing structures on the Project site will be demolished or removed in order to accommodate the Project.

21. Explain whether there are any residential neighborhoods as defined under KRS 278.700(6) without any of “the parameters” that were described in the Motion for Deviation. If so, provide the following for each neighborhood:

- a. Distance to the panel.
- b. Distance to the Inverter.
- c. Distance to the Substation.
- d. Distance to the BESS.

22. Provide a table with the distances from the nearest nonparticipating residence (dwelling not property line) to the following:

- a. Fencing.
- b. Closest solar panel.
- c. Closest inverter.
- d. Substation.
- e. Battery storage

23. Refer to the Motion for Deviation from the Setback Requirements.² For the closest residence (dwelling not property line) in each neighborhood provide a table with the distance to the following:

- a. Fencing.
- b. Closest solar panel.
- c. Closest inverter.
- d. Substation.
- e. Battery Storage

24. Explain whether participating landowners will continue to use property not leased to the Applicant for residential or agricultural purchases. Are there any restrictions within the lease agreements for property not leased to the Applicant?

25. State when the peak construction activity period will occur (which month(s) or quarter of the full construction period).

26. Provide a detailed description of different construction activities, including a construction timeline and schedule by activity, including development of the transmission line.

27. Provide a schedule for the project, starting from the receipt of the proposed certificate of construction to the completion of the project, including the length of each construction phase. Include when the peak construction would occur within the timeline.

28. Provide a narrative description of the proposed transmission line and alternate route, including the number of poles to be installed, the height of the poles and the length and width of the transmission line corridor.

² Summer Shade's Motion for Deviation from the Setback Requirements (filed May 16, 2025).

29. Explain how the proposed transmission route was determined.
30. Provide a map showing the existing property lines that the proposed transmission line is proposed to cross.
31. Provide information on all electric transmission lines that intersect the project. Include in the response the owner, voltage, status, and right-of-way (ROW) setbacks.
32. Detail any communication with the residences closest to the proposed substation location.
33. Explain whether vegetative clearing will be required to accommodate the proposed 300-foot long transmission line. If yes, provide the anticipated acreage of vegetative clearing and any permits that will be required.
34. Explain how the proposed route of the electric transmission line will minimize significant adverse impact to the scenic assets of Kentucky.
35. Provide a detailed map of the proposed transmission line route and the alternate route, including proposed pole locations, access roads and nearby residences.
36. Provide any sketches of the proposed transmission line support structure.
37. Provide a table showing the distance between transmission line structures (poles) and nearby residences, for the proposed route and the alternate route.
38. State the number of individual parcels and landowners participating in the Project, including the transmission line.
39. Update the Revised Site Plan filed on May 16, 2025. Include an icon labeling every residential structure in each map. Update the map legend accordingly.

40. Refer to Application, Appendix B, Solar PV Layout. Highlight all construction entrances to the Project site and all operational entrances to the Project site on the map.

41. Explain why such a substantial amount of proposed access points were proposed.

42. Refer to Application, Appendix B, Solar PV Layout. Identify on the map all above ground and underground infrastructure required to connect the areas of solar panels to the proposed Substation. Provide the total length of cabling used in this infrastructure.

43. Provide a detailed description of different construction activities, including a construction timeline and schedule by activity, including development of the transmission line.

44. Provide the assumption of how many monthly trips for each type of delivery truck will be needed on average over the Project construction period and during the peak construction period.

45. Provide the maximum expected load weights for each type of delivery truck, including cement and water trucks, heavy equipment, gravel for access roads, panels, inverters, and the transformer.

46. Identify the specific roadways used by heavy trucks, including for delivery of the transformer.

47. Provide the estimated weight of the project's required substation transformer and the truck class necessary for its delivery.

48. Explain whether any oversize or overweight deliveries will require special permits from the Metcalfe County Road Department of the Kentucky Department of Transportation. Explain the plan for repairing Project-related damage to any roadways or bridges.

49. Explain whether any traffic stoppages will be necessary to accommodate large truck deliveries for the Project and/or for constructing the Project transmission line. If yes, provide the expected locations, frequency and length of those stoppages.

50. State the local roads that will be utilized for construction of the transmission line. For these roads, provide:

a. A description of current traffic and road conditions, including number of lanes, presence of shoulders and/or bridges, speed and weight limits.

b. Anticipated traffic impacts from transmission line construction activities, i.e., number of construction vehicle trips by type (passenger or delivery) per day, load weights, stoppages, delays, etc.

c. Any road or traffic mitigation measures that will be implemented before or after transmission line construction.

51. Provide the width and weight limit ratings of all bridges and culverts within a two-mile radius of the project.

52. Describe any repairs or upgrades that will need to be made to any bridges or culverts prior to the delivery and construction phase of the project.

53. Provide any communication with the Federal Aviation Administration (FAA) or the Kentucky Airport Zoning Commission regarding the project.

54. Refer to the Kentucky Geological Survey Oil and Gas Wells Search (KY Geode: KGS Oil and Gas Wells Search (uky.edu)).

a. Provide a map with all active and inactive oil or gas wells on the proposed site. Also include any gas- gathering pipelines associated with the wells.

b. Determine and provide an explanation of whether any of these wells are currently permitted and active.

c. Confirm whether the existence of oil and gas wells and pipelines will require adjustments to the proposed location of solar panels for each oil and gas wells and pipelines.

55. Provide any geotechnical reports for the project.

56. Explain any specific restrictions to be placed on the time of day or days of the week during which other loud construction activities, other than pile driving, may take place.

57. Provide the types of equipment used for construction of the transmission line and sound levels generated by this equipment at a distance of 50 feet.

58. State the number of residential structures that may have a view of any portion of the Project, including fencing, solar arrays, substation or other infrastructure.

59. Provide a map of the residential structures that may have a view of any portion of the Project.

60. State the total number of residential structures that may have a view of one or more transmission line poles. State the number of those residential structures with which the Applicant has entered into a ROW agreement.

61. Confirm all cemeteries located within a two-mile radius of the project and provide if the project will restrict access to them in any way. If not, confirmed explain.

62. Provide a one-page directional map showing highlighted anticipated delivery routes for the project. Include on the map: access roads, access points, existing roads, bridges, electric generation components, and all structures within two miles of the project. Differentiate between roads and bridges that will and will not be used for deliveries.

63. State the number of years it will take for planted trees and scrub to reach mature height.

64. Provide how many acres of vegetation are expected by cleared during construction.

65. Provide a narrative description of any vegetative clearing that will occur across the project. Include any permits that will be required.

66. Explain how the project has been designed to minimize the amount of tree clearing required.

67. Provide a map showing all planned areas of vegetative clearing. Include on the map satellite imagery, wetland features, and elevation contours.

68. Explain how Summer Shade plans to mitigate flood risks within the site after vegetative clearing.

69. Provide a wetland delineation report for the project. If one does not exist, provide when one will be produced.

70. Explain whether the Site Layout Plan will be modified after the Wetland Delineations are completed.

71. State whether the Project panels will be coated with an anti-reflective coating. If not, explain why not.

72. Refer to the Application, Attachment D Public Meeting Documentation. Provide any documents that were presented to the community that were not included in Attachment D.

73. Refer to Application, Section 6, Public Notice Report. Provide a summary of all communication to date with that correspondent (e.g., adjoining neighbor #1, adjoining neighbor #2, community member #1, fire department board member #1, etc.). Each correspondence summary must include questions and concerns voiced, information provided, and feedback received.

74. See Application, Attachment A Context Map. One church is within the 2,000-foot radius and located between sections of the proposed project footprint at the southern end. Another church is just beyond the 2,000-foot radius at the northwest side of the site within the Summer Shade community. One church is located within the two-mile radius at the eastern side of the site within the Beaumont community. Section 6 of the Application (Public Notice Report) does not contain any records of communication with church representatives.

a. Describe all correspondence with each church regarding the proposed project and any feedback.

b. Explain if there are any other churches located within the two-mile radius.

75. Explain any plans to coordinate with local landowners or others in case of complaints or other issues that might arise during the course of construction or operations.

76. Provide the Stormwater Pollution Prevention Plan for the project.

77. Provide the Construction Dust Control Plan for the project.

78. Provide a copy of the Groundwater Protection Plan.

79. Provide a hydrological survey related to the drainage within and surrounding the project area.

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

81. Provide copies of documents submitted to other agencies, other than what is provided in the application.

82. Provide any communication with the Kentucky Transportation Cabinet District Engineer, or their representative, regarding permits or agreements necessary for the project. If no communication has been initiated, explain when that contact will occur.

83. Provide information on the specifications, model number, and cutsheets of the photovoltaic (PV) cell/solar panels to be used.

84. Confirm whether the project will have a battery storage system. If a battery storage system is going to be utilized, provide the following:

- a. Safety data sheets for the energy storage system.
- b. The environmental impact of the battery storage system.
- c. Expected life of the batteries.
- d. Method to dispose of batteries at the end of the useful life.

e. Whether the battery storage system installation will comply with National Fire Protection Association Standard 855.

85. Describe the hazard detection systems, such as smoke and heat detectors, as well as gas meters, that will be used within the BESS facility.

86. Describe alert systems that will be in place at the BESS facility and who will monitor and maintain those systems. Explain whether the systems provide remote alert and annunciation to offsite personnel and the fire department.

87. Describe how the BESS facility will be designed to prevent thermal runaway. Include ventilation and air conditioning (HVAC) systems that will be used.

88. Describe the fire suppression systems that will be installed at the BESS facility. Provide the standards those systems will have to meet. Who will monitor and maintain those systems.

89. Explain how the BESS facility will comply with IEEE 1578 standards in relation to electrolyte spills.

90. Explain whether the BESS facility be designed to withstand environmental hazards that may arise within the area.

91. Explain whether Summer Shade will pursue an Industrial Revenue Bond and Payment In Lieu of Taxes agreement with Metcalfe County. If so, explain how that might change the cumulative tax revenues of the Project.

92. Explain whether an Engineering, Procurement, and Construction (EPC) firm has been selected for the project. Provide the request for proposal for the EPC contractor.

93. Explain whether Summer Shade intends to hire as many local workers for the construction and operations phases of the project as possible, all other qualifications

for the positions being equal. If confirmed, explain how Summer Shade will ensure this occurs. If not confirmed, explain why not.

94. Refer to Application, Section 6, Public Notice Report indicates that Summer Shade has discussed agrivoltaics employment opportunities (e.g., sheep grazing) with a local resident. Refer also to Application, Attachment F Economic Analysis, a predominantly qualitative discussion of planned agrivoltaics at the proposed Summer Shade project site.

a. Provide a comprehensive overview of Summer Shade's current plan for agrivoltaics at the proposed project site.

b. Provide a comprehensive overview of the grazing employment discussion with the local resident, as referenced in the Public Notice Report.

c. Describe all site access and safety protocols during the project's operational phase regarding grazing access for herds and shepherds.

95. State the expected operational life of the Project.

96. Explain any commitments regarding infrastructure removal or land restoration during decommissioning included in the landowner lease agreements.

97. Provide any mitigation measures Summer Shade has considered to dampen construction and operational noise.

98. Provide information on any fiber optic or communication network installed as a part of the project and any excavation that may be required for the installation.

99. Refer to the Site Assessment Report (SAR), page 2. Describe the proposed design of the six-foot 'wildlife' fence.

100. Confirm whether all fencing, installed according to National Electric Safety Code standards, will be installed prior to the commencement of any electrical work.

101. Provide information on all natural gas pipelines that intersect the project. Include in the response the owner, pipe diameter, status, and setback requirements.

102. Provide the distance between the existing Summer Shade substation and the proposed project substation.

103. Provide the number of miles between the Summer Shade project and the Glover Creek Solar, LLC (Grover Creek) project in Case No. 2020-00043.³

104. Provide any overlaps in the projected construction schedules of both the Summer Shade project and the Glover Creek project in Case No. 2020-00043.

105. Provide any communication with representatives of Glover Creek regarding the proximity between the two projects. Include in the response any concerns that were raised.

106. Refer to the SAR, Appendix D, Limited Noise Assessment. Explain why the Stantec sound study has been titled 'Limited' since multiple Stantec sound studies submitted to the Siting Board with previous solar facility applications have not had a "Limited" descriptor.

107. Refer to the SAR, Appendix D, Limited Noise Assessment. The Construction Noise Modeling section states that the nearest home will be 185 feet from a solar panel. SAR, Appendix A (Property Value Impacts) states that the nearest home will be 155 feet from a solar panel. Explain this discrepancy.

³ Case No. 2020-00043, *Electronic Application of Glover Creek Solar, LLC For a Construction Certificate To Construct An Approximately 55 Megawatt Merchant Electric Solar Generating Facility in Metcalfe County, Kentucky Pursuant to KRS 278.700 and 807 KAR 5:110.*

108. Refer to the SAR, Appendix D, Limited Noise Assessment. Update Appendix A of the noise assessment (Operational Noise Modeling Results) to list all distances to project components (i.e., fence, panel, inverter, substation, BESS) in feet rather than meters.

109. Refer to the SAR, Appendix D, Limited Noise Assessment. Provide an appendix to the noise assessment that provides all Construction Noise Modeling Results in the same tabular format as Appendix A (Operational Noise Modeling Results). All Receptor IDs and UTM 16 coordinates must match those used in the existing noise assessment. All estimated project construction noise levels (both average and maximum) must be listed for each receptor. All distances to relevant project infrastructure (e.g., fence, solar panel, solar inverter, substation, BESS equipment) must be listed, in feet, for each receptor.

110. Describe the cumulative effects on noise from the construction activities of the two projects, any steps to minimize these effects.

111. Describe the potential for cumulative effects on traffic and roadways from construction activities of the two projects, and any steps planned to minimize these effects.

112. Describe the potential cumulative effects on property values and land uses from the construction and operation of the two projects.

113. Refer to the SAR. Provide why this location was chosen for the project, despite over 55 percent of adjoining parcels being classed as residential.

114. Provide a parcel map for the proposed site. Include the parcel owner, acreage, whether they are participating or non-participating, parcel use, and all proposed project components presented in the site plan.



Linda C. Bridwell, PE
Executive Director
Public Service Commission *on behalf*
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DATED JUN 05 2025

cc: Parties of Record

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