

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

In the Matter of:

ELECTRONIC APPLICATION OF BARRELHEAD	)	
SOLAR, LLC FOR A CERTIFICATE OF	)	
CONSTRUCTION FOR AN APPROXIMATELY 54-	)	CASE NO.
MEGAWATT MERCHANT ELECTRIC SOLAR	)	2025-00177
GENERATING FACILITY IN WAYNE COUNTY,	)	
KENTUCKY PURSUANT TO KRS 278.700 AND	)	
807 KAR 5:110	)	

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

Barrelhead Solar, LLC (Barrelhead Solar), pursuant to 807 KAR 5:001, shall file with the Commission an electronic version of the following information. The information requested is due on December 1, 2025. The Siting Board directs Barrelhead Solar 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 governmental agency, be accompanied by a signed certification of the preparer or the

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).

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.

Barrelhead Solar shall make timely amendment to any prior response if Barrelhead Solar 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 Barrelhead Solar fails or refuses to furnish all or part of the requested information, Barrelhead Solar 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, Barrelhead Solar 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 leases or purchase agreements, including options, separate agreements, or deeds which Barrelhead Solar 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 Barrelhead 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.

3. Explain what portion, if any, of the Project site is located in Clinton County.

4. If any portion of the Project site is located within Clinton County, state whether Clinton County has enacted any setback requirements, noise ordinances, or other regulations applicable to the Project.

5. Provide the total number of months or years of construction. Explain any potential for deviation to that schedule.

6. Refer to the Site Assessment Report (SAR), Appendix B, Preliminary Site Layout. Explain each of the Bertram Exclusion Areas identified on the map.

7. Provide a parcel map, identifying individual parcels within the Project boundary, owner name, and acreage.

8. Explain how Barrelhead Solar plans to mitigate arrivals and departures to minimize disruption to the area.

9. Explain whether the construction and operational entrances will be locked outside of normal working hours.

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

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

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

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

- a. Each construction entrance.
- b. Each entrance to be used in operations.
- c. Operation & Maintenance (O&M) area.
- d. Each laydown area.

14. Provide a detailed table listing all 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.

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

- a. A description of any structure (barn, commercial building, warehouse, church, etc.).
- b. The distance to the boundary line.
- c. The distance to the closest solar panel.
- d. The distance to the nearest inverter.
- e. The distance to the substation.

16. Provide a physical description of the Project transmission line, including number of poles and height of poles, as applicable.

17. Refer to the SAR, Attachment E, System Impact Studies, Phase III Study Report. Explain the “Future Exits” marked on the Diagram of Interconnection Studies, and whether these future exits will impact the Project layout and/or path of transmission lines.

18. Explain whether there will be any special construction activities or personnel required to connect the Project to the existing East Kentucky Power Company transmission line.

19. Explain whether a permanent O&M building will be constructed within the Project boundary. If so, identify the anticipated location of the O&M building on the Preliminary Site Layout map and describe the physical characteristics of the building, i.e., footprint acreage, height.

20. State whether there will be any weather stations located within the Project site. If so, indicate where those stations will be located narratively and on a revised Preliminary Site Layout map.

21. Refer to the SAR, Appendix B, Preliminary Site Layout. Provide the total number of site access entrances in use during the construction phase and provide a narrative description of each entrance location. Provide a revised Preliminary Site Layout map if any of these locations have changed.

22. Refer to the SAR, Appendix B, Preliminary Site Layout. Provide the total number of site access entrances in use during the operations phase and provide a

narrative description of each entrance location. Provide a revised Preliminary Site Layout map if any of these locations have changed.

23. Refer to the SAR, Appendix B, Preliminary Site Layout and Appendix I, Traffic Impact Study. State the total number of individually fenced parcels of solar arrays across the Project site. Provide a revised Preliminary Site Layout map if these fenced parcels have changed.

24. Refer to the SAR, Appendix B, Preliminary Site Layout and Appendix I, Traffic Impact Study. Provide the total number of gates along the fenced parcels of solar arrays, including access points and interior gates. Provide a revised Preliminary Site Layout map with all gate locations depicted.

25. Explain whether each access entrance available during the construction period and during the operational period will have its own security gate.

26. Provide details about the proposed access roads, including total length, width(s) and material(s) used.

27. Provide a detailed description of construction activities, including a construction timeline and schedule by activity, accounting for site preparation and construction of all Project components.

28. State when the peak construction phases will occur (which month(s) of the full construction period), accounting for construction of all Project components.

29. Provide the average number of construction workers on-site each day over the course of the construction period, accounting for construction of all Project components.

30. Refer to the SAR, Section 4 Noise and Section 6 Mitigation, Item 14, which state different times of day in which construction activities would occur. Clarify the days of the week and times of day during which general construction activities would occur and during which higher noise producing activities would occur.

31. Refer to the SAR, Appendix E, Noise Analysis. State whether any of the residential structures located within 2,000 feet of the Project boundary (Table 1) are owned by participating landowners. If so, identify those homes owned by participating landowners.

32. Refer to the SAR, Appendix E, Noise Analysis. State whether any of the residential structures located within 2,000 feet of the Project boundary (Table 1) are owned by participating landowners. If so, identify those homes owned by participating landowners.

33. Refer to the Application and the SAR, Attachment H, Cumulative Environmental Assessment. Explain whether laydown areas will comprise 10-15 acres of the site per the Application or 20-25 acres of the site per Attachment H.

34. Refer to the SAR, Appendix B, Preliminary Site Layout. Provide the acreage for each of the indicated laydown areas.

35. Provide details of any communications to date with the Wayne County Road Department.

36. Provide details of any communications to date with the Clinton County Road Department.

37. Provide the method and route for delivery of the Project Transformer(s).

38. Provide the average daily number of construction vehicles accessing the site, by vehicle type, i.e., worker vehicles, delivery trucks, cement trucks, water trucks (if utilized), other.

39. Provide the peak daily number of construction vehicles accessing the site, by vehicle type, i.e., worker vehicles, delivery trucks, cement trucks, water trucks (if utilized), other.

40. Explain whether any oversize or overweight deliveries will require special permits.

41. Explain whether any improvements to roadways in the Project area will be necessary prior to construction.

42. Explain whether any traffic stoppages will be necessary to accommodate large truck deliveries. If yes, provide the expected location(s), frequency and length of those stoppages.

43. Refer to the SAR, Appendix I, Traffic Impact Study. Provide the estimated weight of the project's required substation transformer and the truck class necessary for its delivery.

44. Describe odor impacts from diesel fumes or other sources from construction vehicles that may be noticeable to nearby residents.

45. Explain whether a plan to coordinate construction activities around the schedules of local churches has been or will be developed. Provide that plan, if developed.

46. Refer to the SAR, Appendix E, Noise Analysis. The residential receptors located at 1837 KY 1009 (next to the church) and at 475 Massingale Road were not

included in the report, tables, or figures. Provide a revised Noise Analysis that includes these residences.

47. Refer to the SAR, Appendix E, Noise Analysis at 12. Explain the basis for the statement that solar pile drivers are quieter than other pile drivers.

48. Refer to the SAR, Appendix E, Noise Analysis, at 12-14.

a. State whether the estimate of 84 dBA at 50 feet for pile driving is for the specific pile driver to be used on this project (Vermeer PD10).

b. Provide supporting documentation for this estimate from within the last five (5) years, such as the manufacturer's specification sheet including sound output.

c. Provide a revised Table 5 with the pile driving column updated for each receptor based on sound output levels from the supporting documents.

49. Provide noise contour maps for the 2,000-foot area surrounding Project boundaries during Project construction and operations, accounting for all Project components and noise receptors.

50. State the number of acres of trees that will be cleared from the Project site and identify the areas where tree clearing will occur.

51. Refer to the Application, Attachment A, Context Maps and the SAR, Appendix B, Preliminary Site Layout. It appears that the Project boundary on the southwest side is different between the two documents. Confirm the full Project boundary and identify with a corrected map.

52. Provide a photo or visual rendering of the perimeter fencing.

53. Refer to the SAR, Appendix F, Landscape Plan. Explain how the specific locations identified for vegetative screening were chosen.

54. Refer to the SAR, Appendix F, Landscape Plan. Explain why no vegetative screening is proposed for the following areas:

a. Along the panels in the southwestern portion of the Project site to shield the structures located to the south of the proposed substation.

b. Along the eastern side of the panels in the northeastern section of the Project site (near the proposed pollinator garden), to shield the home on the south side of KY-1009.

55. Provide a narrative description of the difference between standard screening and heavy screening.

56. Provide visual renderings of Project facilities without and with vegetative screening at locations around the Project site.

57. Refer to the SAR, Section 6, Mitigation Measures, Item 12. State whether the Applicant will monitor all planted vegetation on an on-going basis and commits to replacement of vegetative buffers, as necessary, over the entire 40-year life of the Project.

58. Refer to the SAR, Appendix F, Landscape Plan.

a. Confirm that Barrelhead Solar will be responsible for maintaining the pollinator meadow throughout the life of the Project. If not, identify the responsible party.

b. Explain what would be included as part of maintenance activities.

59. Refer to the SAR, Appendix G, Visual Impact Report. The residential receptors located at 1837 KY 1009 N (next to the church) and at 475 Massingale Road were not included in the report or figures. Provide a revised Visual Impact Report that includes these residences.

60. Refer to the SAR, Appendix G, Visual Impact Report, Table 2. Explain whether planting screening vegetation within the property boundaries of Receptors 27 and 31 would reduce visibility of the Project at those locations.

61. Refer to the SAR, Appendix G, Visual Impact Report, Table 2. State whether the Applicant would be willing to plant vegetative screening directly on the properties of Receptors 27 and 31, if requested or desired by those landowners.

62. Refer to the SAR, Appendix H, Glare Analysis. Provide a map identifying and labeling the locations of the three road segments and 22 observation points evaluated in the Glare Analysis.

63. Refer to the SAR, Appendix H, Glare Analysis. Tables 2 through 4 indicate glare from specific “panel areas”. Provide a map identifying and labeling these different panel areas throughout the Project site.

64. Refer to the SAR, Appendix G, Visual Impact Report at 2, which states that the arrays would be fixed (not rotate with the position of the sun). Explain whether tracking arrays would reduce the potential for glare described in the Glare Analysis.

65. State any concerns or comments provided by representatives of Fairview Church or the Pleasant Ridge Amish Mennonite Church.

66. Provide any available transcripts of the public meetings. Provide any written or oral comments offered by the public or government agencies, from public meetings or through other avenues.

67. Refer to the SAR, Section 6 Mitigation Measures, Item 32. Provide details describing the Complaint Resolution Program, including how the Applicant will coordinate with local landowners or others in case of complaints or other issues that might arise

during the course of construction or operations. If no details are available, provide a copy of a Complaint Resolution Program the Applicant has instituted for a similar solar project.

68. Explain whether a Project website will be established. If so, explain when this will occur. If not, explain the Applicant's plan for providing on-going Project information to the public.

69. Refer to the Application, Attachment F, Economic Analysis, at 9 and 14. Explain what costs are included in the estimated \$35 million in construction compared to the stated roughly \$80 million in capital expenditures.

70. Refer to the Application, Attachment F, Economic Analysis at 9-10. The estimate of 129.6 FTE jobs is based on data obtained from a 2014 California study. Explain whether any more recent studies, or studies focusing on projects located closer to Kentucky are available and applicable to this Project.

71. Refer to the Application, Attachment F, Economic Analysis. Describe the portion of construction workers expected to be hired from within Wayne County and surrounding counties.

72. Refer to the Application, Attachment F, Economic Analysis at 10. Confirm that application of the "industry-specific crosswalk" to convert FTE jobs to total jobs is applicable to development of the Barrelhead Solar facility, given that construction of solar facilities likely requires a wide variety of different skilled workers over the approximately one-year construction period.

73. Refer to the Application, Attachment F, Economic Analysis at 10. Explain the applicability and relevance of including proprietor income in the estimate of total labor

income for construction of the Barrelhead Solar facility, especially given that many workers and materials may come from outside of Wayne County.

74. Refer to the Application, Attachment F, Economic Analysis at 12, Table 4. State the assumed annual labor income per full-time operational employee. State whether that amount also includes benefits.

75. Refer to the Application, Attachment F, Economic Analysis at 12, Table 4. Explain whether the estimated direct labor income of \$608,000 per year includes proprietor income, similar to the analysis of the construction phase.

76. Refer to the Application, Attachment F, Economic Analysis at 12, Table 4. Explain whether the estimated annual output of \$2.6 million is an estimate of annual Project O&M expenditures, with \$1.46 million staying in Wayne County.

77. Refer to the Application, Attachment F, Economic Analysis at 14. Provide estimates of total property taxes anticipated to be paid to local jurisdictions in Wayne County over the 40-year life of the Project.

78. Refer to the Application, Attachment F, Economic Analysis. Provide a summary table showing the estimated net economic impact (1) in the year of construction; (2) annually during the operational period; and (3) cumulative over the 40-year Project life, accounting for impacts related to the construction and operation of the solar facility, changes in agricultural operations and effects of lease payments.

79. Explain whether the Applicant has had any conversations with Wayne County officials regarding the potential for an Industrial Revenue Bond (IRB).

80. Refer to the SAR, Appendix E, Noise Analysis at 14. Explain whether Barrelhead Solar will coordinate with the cemeteries (NR-01 and NR-05) to limit construction activities during funerals.

81. Refer to the SAR, Appendix E, Noise Analysis at 14. Explain whether Barrelhead Solar will coordinate with Fairview Church to limit construction activities during services, bible studies, and other church-related events, including funerals.

82. Refer to the SAR, Appendix E, Noise Analysis. Provide all mitigation measures considered to limit the impact of construction noise.

83. Provide a list of permits that will be required from any other local, state, or federal agencies for the project. Include in the response the status of those permits.

84. Provide copies of any documents submitted to other agencies, other than what was included in the application.

85. Provide the entities with a direct ownership interest in Barrelhead Solar. Also provide the corporate structure of those entities.

86. 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.

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

88. The proposed Project site sits in a karst prone region with high groundwater sensitivity levels. Provide any mitigation measures Barrelhead Solar will implement during construction and operations in response.

89. Explain whether any existing structures on the project site will be demolished during construction.

90. Provide the total length of cabling to be used in the projects' collection system.

91. 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.

92. Provide any karst studies for the project.

93. Provide a parcel map, identifying individual parcels within the Project boundary, owner name, and acreage.

94. Explain whether there will be vegetation clearing for construction. Provide in the response the number of acres that will be cleared and any permits that will be required.

95. Provide a map showing all proposed areas of vegetative clearing within the project site.

96. Provide how many miles of vegetative screening will be included in the project.

97. Refer to SAR at 2. Explain why Barrelhead Solar selected a site despite 62.5 percent of adjoining parcels being residential.

98. Provide any communication representatives of Barrelhead Solar have had with any of the property owners surrounding the project. Explain whether any changes have been made to the project based upon those concerns.

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

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

101. Provide a net decommissioning cost that accounts for the costs and potential salvage value of the substation and transmission line.

102. Provide any materials submitted to other permitting agencies related to this Project.

103. Provide a list of all permits required from other local, state ,or federal agencies for the construction and operation of the Project, indicating the specific agency, permit type and applicability to the Project.

104. Refer to the Application, Appendix J, Decommissioning Plan, Section 2.6. Explain whether the landowner has requested that the substation and transmission line be removed during decommissioning.

105. Refer to the Application, Appendix J, Decommissioning Plan, Section 4. Confirm that the estimated decommissioning costs and revenues do not include removal of the substation and transmission line.

106. Provide a net decommissioning cost that accounts for the costs and potential salvage value of the substation and transmission line.



Linda C. Bridwell, PE
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DATED **NOV 17 2025**

cc: Parties of Record

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