COMMONWEALTH OF KENTUCKY

BEFORE THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING

In the Matter of:

ELECTRONIC APPLICATION OF MANTLE ROCK SOLAR, LLC FOR A CERTIFICATE OF CONSTRUCTION FOR AN APPROXIMATELY 42-MEGAWATT MERCHANT ELECTRIC SOLAR GENERATING FACILITY IN LIVINGSTON COUNTY, KENTUCKY PURSUANT TO KRS 278.700 AND 807 KAR 5:110	)))))))	CASE NO. 2024-00050

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

Mantle Rock Solar, LLC (Mantle Rock), pursuant to 807 KAR 5:001, shall file with the Commission an electronic version of the following information. The information requested is due on October 25, 2025. The Siting Board directs Mantle Rock to the Kentucky Public Service Commission's July 22, 2021 Order in Case No. 2020-00085[1] 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.

Mantle Rock shall make timely amendment to any prior response if Mantle Rock 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 Mantle Rock fails or refuses to furnish all or part of the requested information, Mantle Rock 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, Mantle Rock 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 Mantle Rock 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 Mantle Rock 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. Provide a parcel map, identifying individual parcels within the Project boundary, owner name, and acreage.

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

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

6. Provide a schedule and a detailed description of construction activities 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.

7. 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.

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

9. 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.

10. Explain whether an 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.

11. Provide the type and method of pile driving equipment that will be utilized at the time of construction.

12. Provide a detailed table listing all residential structures located within 2,000 feet of the Project boundary line. Indicate whether the residential structures are participating or non-participating.

13. 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.

14. 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.

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

16. Explain whether the perimeter security will be installed according to National Electric Safety Code (NESC) standards. Include in the response whether the fencing will be installed before any electrical work begins.

17. Explain whether the substation will have its own separate fencing and if it comply with NESC standards.

18. Explain if an Engineering, Procurement, and Construction (EPC) firm has been selected for the project. If not, provide the request for proposal (RFP) for the EPC contractor.

19. Provide any communication that has occurred with any schools within a two-mile radius of the project. Provide any communication and any concerns that were raised.

20. Provide the security measures for the operating and maintenance (O&M) areas and substation within the project's boundaries.

21. Explain how Mantle Rock will coordinate with local law enforcement and fire services regarding security and emergency protocols during construction and operations.

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

23. Describe any utilities that will be required during construction or operations and what utility will provide the service.

24. 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.

25. Refer to the Third Renewed and Restated Notice of Intent. The coordinates provided place the project near Murray, Kentucky. Provide the correct coordinates for the project.

26. Refer to Site Assessment Report (SAR) Attachment B, Context Map. Explain whether existing access to any of the three cemeteries located within the Project boundaries will be altered, limited or prohibited during construction or throughout the Project's operational period.

27. Refer to SAR, Appendix A, Preliminary Site Layout, and Attachment B, Context Map. Explain whether the small cemetery located at the southern end of the Project site, near Carrsville Road, will be covered with panels.

28. Provide a one-page directional map within the county 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.

29. Provide a map highlighting all construction entrances to the Project site and all roads proposed to be used.

30. Identify all roads within the county proposed to be used during the delivery/construction phase of the project. Identify the width and weight capacity of each

bridge and any upgrades or repairs that will need to be made prior to the commencement of construction.

31. Explain the plan for repairing Project-related damage to any roadways or bridges.

32. Explain 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.

33. Refer to the SAR, Appendix B, Preliminary Site Layout at 3. The text indicates that access control points are marked on the Preliminary Site Layout map, however, they are not identified on the map or legend. Provide a revised Preliminary Site Layout map with all access control points marked and labeled.

34. Refer to the Application at 22, and SAR Appendix B, Preliminary Site Layout. The Application states 10-15 acres will be used as laydown areas, however, only one laydown area is identified on the Preliminary Site Layout map. Describe the locations for the additional Project laydown areas located within or adjacent to the Project site during construction and provide a revised Preliminary Site Layout map with all laydown areas marked and labeled.

35. Refer to 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.

36. Refer to 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.

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

38. Refer to SAR, Appendix B, Preliminary Site Layout. Explain why an access road connects to the "Restricted Area-Cemetery" instead of to Carrsville Road, as depicted in SAR Appendix E (Landscape Plan). Provide a revised Preliminary Site Layout map, as appropriate.

39. Refer to SAR, Appendix B, Preliminary Site Layout. There are no access road connections for several areas of solar panels, including to the southwest and southeast of Good Hope Baptist Church, and the northern sections immediately east and west of Carrsville Road. Explain why there are no internal roads there and how these panel areas will be accessed during construction and operation. Provide a revised Preliminary Site Layout map, as appropriate.

40. Refer to Appendix B, Preliminary Site Layout. Confirm that the Project will construct a 0.06 km transmission line running east from the substation. Provide a physical description of the Project transmission line, including number of poles and height of poles, as applicable.

41. Refer to Appendix B, Preliminary Site Layout. Provide a revised Preliminary Site Layout map with the existing Buma Tap–Joy transmission line and the Project Point of Interconnection marked and labeled.

42. Describe any special construction activities or personnel required to connect the Project to the existing Buma Tap - Joy transmission line.

43. Explain how the proposed transmission route was determined.

44. 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. Include any sketches of the proposed transmission line support structure.

45. Provide a map showing the existing property lines that the proposed transmission line is proposed to cross.

46. Provide a map showing all electric transmission lines that intersect the project.

47. Provide the number of individual parcels and landowners participating in the Project, including the transmission line.

48. 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.

49. 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 identify whether any of these wells are currently permitted and active.

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

50. Refer to the Application, Attachment E, Public Involvement Activities. The substation location provided in the map is different to the substation location provided in the preliminary site layout. Provide the following:

a. Whether the substation location provided in the preliminary site layout is the correct location.

b. Whether the public is aware of the correct substation location.

51. Refer to SAR, Appendix G, Noise Analysis. Explain whether any of the eight residential structures located within 2,000 feet of the Project boundary are owned by participating landowners. If so, identify those homes owned by participating landowners.

52. Refer to SAR, Attachment A, Property Value Impact Analysis at 2, and Appendix G, Noise Analysis Report at 2 (table) and 5 (map). Indicate which properties, homes, and structures listed in the Property Value Report are the same as those listed in the Noise report. These lists do not appear to be consistent with one another, in terms of structures or distances.

53. Provide a detailed table outlining the anticipated construction noise levels for each non-residential structure within 2,000 feet. Include sound levels for pile driving, and the number of feet from each structure.

54. Provide a detailed table outlining the anticipated operational noise levels for each residential structure within 2,000 feet. Include sound levels for inverters, panels, and substations, and the number of feet from each structure.

55. Detail any communications with members of the public, including neighboring landowners, regarding construction noise.

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

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

58. Provide a copy of the Groundwater Protection Plan.

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

60. 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.

61. Provide who will control access to the site during construction and operations.

62. Refer to SAR, Appendix H, Traffic Study.

a. Provide the weight limits of each local roadway to be used for construction traffic.

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

c. 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.

d. Provide the number and approximate weight classes of the heavy and light duty trucks anticipated on site per day during the construction phase.

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

63. Identify the specific roadways to be used by heavy trucks, including for delivery of the transformer.

64. Provide the method and route for delivery of the Project transformer.

65. Explain whether any traffic stoppages will be necessary to accommodate large truck deliveries. If yes, provide the expected locations, frequency, and length of those stoppages.

66. If applicable, describe odor impacts from diesel fumes or other sources from construction vehicles that may be noticeable to nearby residents.

67. Explain whether the Project site will be irrigated to promote vegetation growth and reduce potential erosion.

68. Explain whether any measures will be taken to reduce construction-related noise emissions and impacts for nearby residents during construction.

69. 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.

70. State the date for any meetings held with Good Hope Baptist Church representatives.

71. State any concerns or comments received during meetings with Good Hope Church representatives.

72. Refer to SAR, Attachment B, Context Map. Explain whether the three residences located along the boundary of the Project site are participating landowners.

73. Provide details to any communications with Livingston County Road Department. If no communication has been initiated, explain when that contact will occur.

74. 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.

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

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

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

78. 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.

79. Provide the planned time for construction to begin and end each day. Explain how Mantle Rock plans to mitigate arrivals and departures to minimize disruption to the area.

80. Provide any communication representatives of Mantle Rock 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.

81. Explain whether Mantle Rock will pursue an Industrial Revenue Bond and Payment In Lieu of Taxes agreement with Livingston County. If yes, explain how that might change the cumulative tax revenues of the Project.

82. Explain whether Mantle Rock 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. Include in the response an explanation of how Mantle Rock will ensure this occurs.

83. Explain whether a battery energy storage energy system (BESS) will be a part of this project. If yes, provide the following:

a. Safety data sheets for the energy storage system.

b. The environmental impact of the batter storage system.

c. Expected life of the batteries.

d. Method to dispose of batteries at the end of the useful life.

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

84. Refer to SAR, Attachment E, Public Involvement Activities. Explain why the Project website (mantlerocksolar.com) identified in the letters to homeowners is not active. Provide screen shots of the information available on the website at the time the letters were sent (September 2023).

85. Explain whether and when a Project website will be (re)established. If not, what is the Applicant's plan for providing on-going project information to the general public.

86. Refer to SAR, Attachment A, Property Value Impact Analysis at 8, and Appendix G, Noise Analysis Report at 2 (table) and 5 (map). Indicate which properties, homes, and structures listed in the Property Value report are the same as those listed in

the Noise report. These lists do not appear to be consistent with one another, in terms of structures or distances.

87. Refer to the Application, Attachment E, Public Involvement Activities. There is no mention of a BESS facility on the slides provided. Provide the following:

a. Explain whether Mantle Rock always intend to include a BESS facility in this project.

b. Explain whether the public aware that there will be a BESS facility included as part of the project.

c. Explain whether participating landowners are aware there is a BESS facility proposed as part of this project.

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

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

90. Refer to the Application, Section 2, Description of Proposed Site. Paragraph two states that "an additional 24 BESS equipment enclosures could augment capacity in the future." Explain whether the Project will add the additional enclosures over the life of the Project as described in SAR Attachment A, Facility Equipment, page 5.

91. Refer to the Application, Section 2, Description of the Proposed Site. Explain whether the potential additional 24 BESS enclosures would be located within the 2.36-acre BESS area described in the Application.

92. Provide the distance between Carrsville Road and the BESS area.

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

94. Describe the fire suppression systems that will be installed at the BESS facility. Include in the response the standards those systems will have to meet, who will monitor and maintain those systems.

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

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

97. Explain whether the BESS will be enclosed within the perimeter fencing, within the separately fenced substation area, or within its own fenced area.

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

99. Refer to SAR Appendix E, Landscape Plan. Explain why the following areas do not include proposed vegetative screening:

a. Area northwest of the intersection of Carrsville Road and Maxfield Road.

b. Area south of the panels on the east side of the Project site, opposite Segment 07.

c. Area south and west of the panels at the southwest side of the Project site, south of the BESS area, where natural vegetation is sparse.

d. Area to the north of the northeast corner of the Project site, where there is no natural vegetation.

100. Refer to SAR, Appendix E, Landscape Plan, Visual Buffer Rendering. Provide the locations of each set of photos in relation to the Project site. Explain how those specific locations were chosen for the rendering photos.

101. Explain how many years it will take planted vegetation to reach maturity.

102. Refer to SAR, Appendix F, Glare Analysis. Provide a detailed map identifying the locations of the 13 observation points and six roadway segments evaluated in the glare analysis.

103. Refer to SAR, Appendix F, Glare Analysis. Explain how the 13 observation points and six roadway segments evaluated in the glare analysis were chosen.

104. Refer to the Application at 9, and SAR Attachment E, Public Involvement Activities. Provide the sign-in sheets for each of the public meetings and state how many people attended.

105. Refer to the Application at 10. Provide the dates of meetings held, and list of meeting attendees for each meeting with local officials/agencies and interested parties/nearby landowners.

106. 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, including the Project website.

107. Refer to SAR, Attachment G, Economic Analysis. Describe the portion of the total $70 million dollar investment that might be spent in the local area (Livingston and surrounding counties).

108. Refer to SAR, Attachment G, Economic Analysis. Explain whether the estimated $70 million dollar investment reflects a 65 MW project or the 42 MW Mantle Rock project. Provide a revised estimate, as necessary.

109. Refer to SAR, Attachment G, Economic Analysis, page 7–9. The estimate of 156 direct construction jobs and payroll appears to be based on a 65 MW project. Revise the estimates of construction jobs and payroll to reflect the 42 MW Mantle Rock Project as needed.

110. Refer to SAR, Attachment G, Economic Analysis, at 10. Provide a revised Table 5 to accurately reflect the effects of the 42 MW Mantle Rock Project.

111. Refer to SAR, Attachment G, Economic Analysis, page 11. The estimate of 2.1 direct operations jobs and payroll appears to be based on a 65 MW project. Revise the estimates of operations jobs and payroll throughout the report to reflect the 42 MW Mantle Rock Project as needed.

112. Explain the Project's plan to use sheep for solar grazing during operations (i.e., how many sheep per fenced parcel, how and how often will they be transported to/from the site, how they will be monitored, etc.)

113. Refer to SAR, Attachment G, Economic Analysis. Explain whether the personnel requirements and costs of sheep grazing and management (described in the Noise Analysis Report) are accounted for in the economic analysis.

114. Refer to SAR, Attachment G, Economic Analysis, at 13. Confirm that the estimates of property tax revenues provided reflect the 42 MW Mantle Rock Project, not a 65 MW project.

115. Refer to SAR, Attachment G, Economic Analysis, page 22, Net Annual Impacts Table. Farming data in the table reflects direct impacts only, while solar operations and lease payment data reflect total impacts. Provide a revised table, as necessary.

116. Refer to SAR, Attachment G, Economic Analysis, at 22, Table entitled Net Impacts over Three Decades. Solar related data in the table (employment and income) appears to reflect a 65 MW project. Provide a revised table, as necessary, to reflect solar-related employment and income for the 42 MW Mantle Rock facility.

117. Refer to SAR, Attachment G, Economic Analysis, at 22, Net Economic Impacts over Three Decades Table. The agriculture-related employment data should be negative in all table columns, reflecting job losses. Provide a revised table, to reflect direct and indirect job losses in the agricultural industry in all years.

118. Refer to SAR, Attachment G, Economic Analysis, page 22, Net Economic Impacts over Three Decades table. The data provided for cumulative 30-year total for agriculture-related labor income losses appears to only reflect a two-year period. Provide a revised table, to account for total agricultural labor income losses over a 30-year period.

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

120. Refer to SAR, Attachment H, Decommissioning Plan, Section 1. Explain the statement that "summary statistics and estimates provided are based on a 67.2 MW Project array design and a 168 MWh BESS," in contrast to other application materials that describe the Project as a 42 MW facility.

121. Refer to the Application, Attachment H, Decommissioning Plan, Section 2.6. Explain the difference between the 5.8-acre BESS area described in the Decommissioning Plan versus the 2.36-acre BESS area described in the Application, Section 2.

122. Provide the number of residential structures and non-residential entities (i.e., churches may have a view of any portion of the Project, including fencing, solar arrays, substation or other infrastructure.

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

124. Explain what criteria was utilized by Mantle Rock to determine that there are no residential neighborhoods, schools, hospitals, or nursing home facilities within 2,000 feet of the project.

Linda C. Bridwell, PE
Executive Director
Public Service Commission *on behalf of* the Kentucky State Board on Generation and Transmission Siting
P.O. Box 615
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DATED **OCT 07 2025**

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