COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY)	
POWER COMPANY FOR (1) AN ORDER)	
APPROVING THE TERMS AND CONDITIONS OF)	
THE RENEWABLE ENERGY PURCHASE)	
AGREEMENT FOR SOLAR ENERGY)	
RESOURCES BETWEEN KENTUCKY POWER)	CASE NO.
COMPANY AND BRIGHT MOUNTAIN SOLAR,)	2024-00243
LLC; (2) AUTHORIZATION TO ENTER INTO THE)	
AGREEMENT; (3) RECOVERY OF COSTS)	
THROUGH TARIFF P.P.A.; (4) APPROVAL OF)	
ACCOUNTING PRACTICES TO ESTABLISH A)	
REGULATORY ASSET; AND (5) ALL OTHER)	
REQUIRED APPROVALS AND RELIEF)	

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION TO KENTUCKY POWER COMPANY

Kentucky Power Company (Kentucky Power), pursuant to 807 KAR 5:001, shall file with the Commission an electronic version of the following information. The information requested is due on September 25, 2024. The Commission directs Kentucky Power to the 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

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).

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 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.

Kentucky Power shall make timely amendment to any prior response if Kentucky Power 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 Kentucky Power fails or refuses to furnish all or part of the requested information, Kentucky Power shall provide a written explanation of the specific grounds for its failure to completely and precisely respond.

Careful attention shall be given to copied and 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, Kentucky Power shall, in accordance with 807 KAR 5:001, Section 4(10), encrypt or redact the paper so that personal information cannot be read.

1. Refer to the Application, page 6. Confirm that the estimated capacity benefit of \$2.1 million, the estimated energy benefit of \$42.6 million, and the estimated renewable

energy credit (REC) benefit of \$42.6 million on a net present value basis over the 15-year life of the contract equals \$87.3 million attributable to the REPA.

- 2. Refer to the Direct Testimony of Tanner S. Wolfram (Wolfram Direct Testimony), page 7, lines 16–20.
- a. Explain whether the 4.8 MW of accredited capacity is reflective of Kentucky Power's PJM summer capacity obligation only.
- b. Explain whether the 4.8 MW is based on an effective load carrying capability (ELCC) measure. If not, explain the basis for the 4.8 MW capacity accreditation from an 80 MW facility.
- 3. Provide PJM's published Base Residual Auction (BRA) ELCC Class Ratings for both solar and wind resources for the current planning year through 2040. If PJM does not have published estimate extending to 2040, provide Kentucky Power's estimation of those resource ratings that governed the amounts of renewable resources included in its 2022 IRP Preferred Plan.
- 4. Refer to the Wolfram Direct Testimony, page 8, lines 1–3. Explain whether the Project will supply approximately three percent of Kentucky Power's energy needs during the winter season.
- 5. Refer to the Application, page 6, and Wolfram Direct Testimony, page 15, lines 1–8. The Application indicates that energy revenues will flow back to customers through the Fuel Adjustment Clause (FAC) and Mr. Wolfram's testimony indicates that the renewable energy purchase agreement (REPA) costs will be recovered through Tariff P.P.A. Reconcile the apparent discrepancies in cost recovery.

- 6. Explain how and at what rate(s) the Bright Mountain Solar facility's energy will be bid into the PJM energy day ahead market.
- a. If the PJM day ahead and or real time locational marginal price (LMP) is greater than the fixed \$83.68 per MWh solar cost, explain when PJM would call on that unit to produce energy.
- b. Because Kentucky Power would be obligated to take all energy produced by the Bright Mountain solar facility, for the hours when the real time energy LMP is less than the \$83.68 per MWh cost of produced energy, explain how Kentucky Power intends to recover the cost differential for that higher cost energy.
- 7. Refer to the Direct Testimony of Nicole M. Coon (Coon Direct Testimony), page 4, lines 5–10. Provide all workpapers and assumptions regarding the estimation of the \$42.57 million in energy benefits. Workpapers should be in original format if in Excel, with all formulas, rows, and columns unprotected and fully accessible. Include with the response a specific discussion of the following:
- a. Explain how the forecasted LMP was derived over the 15-year contract period.
- b. Explain how the facility's bid offer curve into the day ahead energy market is forecast and derived.
- 8. Refer to the Coon Direct Testimony, page 4, lines 11–18. Provide all workpapers and assumptions regarding the estimation of the \$2.06 million in capacity benefits. Workpapers should be in original format if in Excel, with all formulas, rows, and columns unprotected and fully accessible. Include with the response a specific discussion of how the forecasted cost of capacity was derived over the 15-year contract period.

- 9. Refer to the Coon Direct Testimony, page 4, lines 19–26. Provide all workpapers and assumptions regarding the estimation of the \$42.58 million in REC benefits. Workpapers should be in original format if in Excel, with all formulas, rows, and columns unprotected and fully accessible. Include with the response a specific discussion of how the forecasted REC market price was derived over the 15-year contract period.
- 10. Refer to the Coon Direct Testimony, page 4, lines 11–26. Provide a cost benefit study showing the annual costs and revenue streams separately that demonstrates the project is beneficial overall to Kentucky Power ratepayers. Provide the cost benefit study in Excel spreadsheet with all formulas, rows, and columns unprotected and fully accessible.
- 11. Refer to the Coon Direct Testimony, Figure NMC-1, page 5. Provide an update to Figure NMC-1 showing the annual impact for the life of the contract.
- 12. Refer to Kentucky Power's integrated resource plan (IRP) in Case No. 2023-00092.² Include the Bright Mountain Solar facility PPA as a resource option along with the other resources discussed in Section 5 of the IRP and provide the results of how this additional resource affects the resulting portfolios and Kentucky Power's IRP preferred plan as presented and discussed in Section 7 of the IRP. If any inputs or assumptions are updated, provide a discussion of those changes.
- 13. Refer to the Direct Testimony of Zachary M. Yetzer (Yetzer Direct Testimony), page 8, lines 19–24. Provide the workpapers supporting the key price

² Case No. 2023-00092, Electronic 2022 Integrated Resource Planning Report of Kentucky Power Company (filed Mar. 20, 2023).

analyses (levelized adjusted net cost of energy, and levelized adjusted net cost of capacity, and value to cost ratio) and explain the assumptions driving each analysis.

- 14. If the underlying assumptions driving each of these analyses differ from the analogous assumptions utilized in the analyses presented in the Coon Direct Testimony, page 8, lines 9–21, provide a detailed comparison and discuss the reasons for any differences.
- 15. Refer to the Yetzer Direct Testimony, page 11, lines 1–4. Explain whether the \$83.68 per MWh price paid to Bright Mountain can be broken out by energy, capacity, and REC cost elements. If so, provide the separate cost elements.
- 16. Refer to the Yetzer Direct Testimony, Confidential Exhibit ZMY-4, Section 5.6, page 29. Explain the rationale for the scheduling arrangements between Kentucky Power and Bright Mountain.
- 17. Refer to the Yetzer Direct Testimony, Exhibit ZMY-1, pages 62–85. Kentucky Power's IRP Preferred Plan calls for 700 MW of wind capacity beginning in 2026. Explain how many proposals for wind were received and a summary of the results of Kentucky Power's evaluations.
- 18. Refer to the Yetzer Direct Testimony, Exhibit ZMY-1, pages 28–58. Explain how many bids were received in response to the thermal Request for Proposal (RFP), were evaluated and a summary of Kentucky Power's individual bid evaluations.
- 19. Refer to Kentucky Power's IRP, Preferred Plan, pages 173–174 of 1182 which calls for a 480 MW combustion turbine (CT) in 2029.

a. In light of recent PJM BRA results, explain why it is prudent to wait

till 2029 to bring CTs on-line and to purchase an estimated 407 MW of capacity in 2028.3

b. Assuming that Kentucky Power is going to bring a thermal resource

on-line in 2029, explain the projected lead time required for both a CT and a natural gas

combined cycle unit, including the filing of a Certificate of Public Convenience and

Necessity (CPCN).

Linda C. Bridwell, PE Executive Director

Public Service Commission

P.O. Box 615

Frankfort, KY 40602

DATED <u>SEP 11 2024</u>

cc: Parties of Record

³ See Case No. 2023-00092, Figure 80 at 174.

*Angela M Goad Assistant Attorney General Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204 *Katie M Glass Stites & Harbison 421 West Main Street P. O. Box 634 Frankfort, KENTUCKY 40602-0634

*Hector Garcia Kentucky Power Company 1645 Winchester Avenue Ashland, KY 41101 *Lawrence W Cook Assistant Attorney General Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204

*Jody Kyler Cohn Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202 *J. Michael West Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204

*Jody M Kyler Cohn Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202 *Honorable Michael L Kurtz Attorney at Law Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202

*John G Horne, II Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204 *Tanner Wolffram American Electric Power Service Corporation 1 Riverside Plaza, 29th Floor Post Office Box 16631 Columbus, OHIO 43216

*Kentucky Power Company 1645 Winchester Avenue Ashland, KY 41101

*Kenneth J Gish, Jr. Stites & Harbison 250 West Main Street, Suite 2300 Lexington, KENTUCKY 40507