COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY)
POWER COMPANY FOR (1) A GENERAL)
ADJUSTMENT OF ITS RATES FOR ELECTRIC)
SERVICE; (2) APPROVAL OF TARIFFS AND)
RIDERS; (3) APPROVAL OF ACCOUNTING) CASE NO.
PRACTICES TO ESTABLISH REGULATORY) 2020-00174
ASSETS AND LIABILITIES; (4) APPROVAL OF)
A CERTIFICATE OF PUBLIC CONVENIENCE)
AND NECESSITY; AND (5) ALL OTHER)
REQUIRED APPROVALS AND RELIEF)

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

Kentucky Power Company (Kentucky Power), pursuant to 807 KAR 5:001, is to file with the Commission an electronic version of the following information. The information requested herein is due on February 22, 2021. The Commission directs Kentucky Power to the Commission's March 16, 2020 and March 24, 2020 Orders in Case No. 2020-00085¹ regarding filings with the Commission. The Commission expects the original documents to be filed with the Commission within 30 days of the lifting of the current state of emergency. All responses in paper medium shall be appropriately bound, tabbed, and indexed. Electronic documents shall be in portable document format (PDF), shall be searchable, and shall be appropriately bookmarked.

¹ Case No. 2020-00085, Electronic Emergency Docket Related to the Novel Coronavirus COVID-19 (Ky. PSC Mar. 16, 2020), Order at 5–6. Case No. 2020-00085, Electronic Emergency Docket Related to the Novel Coronavirus COVID-19 (Ky. PSC Mar. 24, 2020), Order at 1–3.

Each response 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 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 when made or, though correct when made, is now incorrect 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 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.

Refer to Section II of the Application, Exhibit D, page 135 of 185, Tariff
 N.M.S. II, Application, Inspection and Processing Fees.

- a. Explain how Kentucky Power would decide whether an impact study is necessary with respect to a Level 2 Application.
- b. Provide the total cost of each impact study performed from 2016 to present.
- 2. Refer to the Direct Testimony of Alex E. Vaughan (Vaughan Direct Testimony), page 22, lines 16–17, which states, "This is appropriate because a growing amount of the Company's cost of service is comprised of fixed costs related to infrastructure investments."
- a. Provide all analyses Kentucky Power conducted to substantiate this claim.
- b. Provide a definition of "fixed costs" as used in the above sentence, including, but not limited to, the Federal Energy Regulatory Commission (FERC) accounts, or classified costs in Kentucky Power's cost study, considered as fixed costs.
 - 3. Refer to Vaughan Direct Testimony, page 22, line 17, to page 23, line 2.
- a. Provide all analysis and documents that Kentucky Power relied on as support for this section of testimony.
- b. Explain how the changes in the PJM market directly influenced the on to off peak changes Kentucky Power is proposing. Provide all workpapers associated with your analysis, including all calculations in Excel spreadsheet format with formulas intact and unprotected, and all rows and columns fully accessible.
- 4. Refer to Vaughan Direct Testimony, page 24, lines 16–18. Explain and provide the analysis that Kentucky Power relied upon for determining the two netting time periods (i.e., 8 AM to 6 PM and 6 PM to 8 AM).

- 5. Refer to Vaughan Direct Testimony, page 27, lines 10–11. Describe how marginal losses, congestion, and distribution losses (primary and secondary) are calculated and included in the avoided cost rate, and identify the individual dollar value of each of those components. Provide workpapers supporting the calculations in Excel spreadsheet format with formulas intact and unprotected, and all rows and columns fully accessible.
- 6. Refer to KPCO_R_KPSC_3_1_Attachment17_VaughanWP3. Identify all components of the "On Pk" and "Off Pk" \$/kWh values in the Cogen SPP Energy values in rows 15 and 16 on tab "Excess Gen Price", and provide the calculations in Excel spreadsheet format with formulas intact and unprotected, and all rows and columns fully accessible.
- 7. Provide 8760-hour system and residential load profiles for each of last five years in Excel spreadsheet format with formulas intact and unprotected, and all rows and columns fully accessible.
- 8. Refer to Kentucky Power's Post-Hearing Brief, page 100. Explain whether the described "cost of service analysis" conducted by Kentucky Power refers to the avoided cost calculations in AEV-3. Describe and produce any other cost of service analyses, aside from AEV-3, that have informed the appropriateness of the proposed compensation rate.
- 9. Refer to the Rebuttal Testimony of Alex E. Vaughan (Vaughan Rebuttal Testimony), Exhibit AEV-R4. Provide all supporting work papers in Excel spreadsheet format with formulas intact and unprotected, and all rows and columns fully accessible. Also, provide links or copies of all references used to support the workpapers.

- 10. Refer to Vaughan Rebuttal Testimony, page 28, which states, "the energy value is then grossed up for avoided primary distribution level losses."
- a. Provide the percentage of residential customers who take service at the primary distribution service level.
- b. Explain why it is appropriate to not gross up losses at the secondary level for those taking service at the secondary level.
- 11. Refer to Vaughan Rebuttal Testimony, page 28. For the most recent ten years available, provide Kentucky Power's highest 876 hours of load at the distribution level for each year. Provide your answer in Excel spreadsheet format with formulas intact and unprotected, and all rows and columns fully accessible.
- 12. Refer to Vaughan Rebuttal Testimony, page 28. For the most recent three years available, provide Kentucky Power's highest 876 hours of load at each distribution substation for each year. Provide your answer in Excel spreadsheet format with formulas intact and unprotected, and all rows and columns fully accessible.
- 13. Refer to Vaughan Rebuttal Testimony, page 28. Define "highest distribution loading (peak loads [sic]) events ... (and) ... the Company designs its distribution system to service the highest peak load."
- a. Explain whether peak loads vary by circuit or substation, or both, and provide documents that substantiate your response.
- b. Explain Kentucky Power's approach to sizing substations, including, but not limited to, the load forecasts that are utilized for sizing substations and whether a distribution system peak or a more local forecast is used to size substations.

- 14. Refer to Vaughan Rebuttal Testimony in general. Provide Kentucky Power's distribution system planning guidelines and manuals used for planning, sizing, and replacing distribution system equipment.
- 15. Refer to Vaughan Rebuttal Testimony in general. Provide Kentucky Power's distribution system planning criteria used for determining whether equipment requires replacement for thermal violations.
- 16. Refer to Vaughan Rebuttal Testimony, page 29, lines 12–20. Also, refer to Vaughan Direct Testimony, page 26, line 20, to page 27, line 6. Explain how load reductions from solar are accounted for by PJM, and provide all references relied upon for your answer.
- 17. Refer to KPCO_R_KYSEIA_1_3_Attachment1. Explain the source of the solar project data used in the "Peak Reduction" tab. Include in your answer, but do not limit it to, the number of facilities and years the data represents. Provide all workpapers relied upon to support both the initial and current discovery request, including calculations in Excel spreadsheet format with formulas intact and unprotected, and all rows and columns fully accessible.
- 18. Refer to the Rebuttal Testimony of Brian K. West, page 15. Provide the screening criteria Kentucky Power uses to evaluate interconnecting facilities, and include a detailed explanation of how each screening criteria is tested and the associated assumptions.

Linda C. Bridwell, PE
Executive Director
Public Service Commission
P.O. Box 615

Frankfort, KY 40602

DATED FEB 1	2 2021
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cc: Parties of Record

*Angela M Goad Assistant Attorney General Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204 *Honorable David Edward Spenard Strobo Barkley PLLC 239 South 5th Street Ste 917 Louisville, KENTUCKY 40202 *Katie M Glass Stites & Harbison 421 West Main Street P. O. Box 634 Frankfort, KENTUCKY 40602-0634

*Barry Alan Naum Spilman Thomas & Battle, PLLC 1100 Brent Creek Blvd., Suite 101 Mechanicsburg, PENNSYLVANIA 17050 *Thomas J FitzGerald Counsel & Director Kentucky Resources Council, Inc. Post Office Box 1070 Frankfort, KENTUCKY 40602 *Lisa A. Lucas Administrative Assistant Jenkins Fenstermaker, PLLC 325 Eighth Street Huntington, WEST VIRGINIA 25701

*Clay A. Barkley Strobo Barkley PLLC 239 South 5th Street Ste 917 Louisville, KENTUCKY 40202 *Hector Garcia-Santana American Electric Power Service Corporation 1 Riverside Plaza, 29th Floor Post Office Box 16631 Columbus, OHIO 43216 *Larry Cook Assistant Attorney General Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204

*Carrie H Grundmann Spilman Thomas & Battle, PLLC 110 Oakwood Drive, Suite 500 Winston-Salem, NORTH CAROLINA 27103 *Jody Kyler Cohn Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202 *Michael A Frye Honorable Jenkins Fenstermaker, PLLC 325 Eighth Street Huntington, WEST VIRGINIA 25701

*Joe F Childers
Joe F. Childers & Associates
300 Lexington Building
201 West Short Street
Lexington, KENTUCKY 40507

*John Horne
Office of the Attorney General Office of Rate
700 Capitol Avenue
Suite 20
Frankfort, KENTUCKY 40601-8204

*Matt Partymiller
President
Kentucky Solar Industries Association
1038 Brentwood Court
Suite B
Lexington, KENTUCKY 40511

*Christen M Blend American Electric Power Service Corporation 1 Riverside Plaza, 29th Floor Post Office Box 16631 Columbus, OHIO 43216 *Honorable Kurt J Boehm Attorney at Law Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202 *Matthew Miller Sierra Club 50 F Street, NW, Eighth Floor Washington, DISTRICT OF COLUMBIA 20001

*Don C Parker Spilman Thomas & Battle, PLLC 300 Kanawha Blvd, East Charleston, WEST VIRGINIA 25301

*Kentucky Power Company 1645 Winchester Avenue Ashland, KY 41101 *J. Michael West Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204 *Honorable Michael L Kurtz Attorney at Law Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202

*Honorable Mark R Overstreet Attorney at Law Stites & Harbison 421 West Main Street P. O. Box 634 Frankfort, KENTUCKY 40602-0634

*Robert D. Gladman American Electric Power Service Corporation 1 Riverside Plaza, 29th Floor Post Office Box 16631 Columbus, OHIO 43216

*Randal A. Strobo Strobo Barkley PLLC 239 South 5th Street Ste 917 Louisville, KENTUCKY 40202

*Tanner Wolffram American Electric Power Service Corporation 1 Riverside Plaza, 29th Floor Post Office Box 16631 Columbus, OHIO 43216