COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR 1) CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A NEW GENERATION RESOURCES; 2) FOR A SITE COMPATIBILITY CERTIFICATE RELATING TO THE SAME; 3) APPROVAL OF DEMAND SIDE MANAGEMENT TARIFFS; AND 4) OTHER GENERAL RELIEF

CASE NO. 2024-00370

)

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION TO EAST KENTUCKY POWER COOPERATIVE, INC.

East Kentucky Power Cooperative, Inc. (EKPC), pursuant to 807 KAR 5:001, shall file with the Commission an electronic version of the following information. The information requested is due on January 3, 2025. The Commission directs EKPC 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 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.

EKPC shall make timely amendment to any prior response if EKPC 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 EKPC fails or refuses to furnish all or part of the requested information, EKPC 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, EKPC shall, in accordance with 807 KAR 5:001, Section 4(10), encrypt or redact the paper so that personal information cannot be read.

1. Explain whether EKPC is aware of any discussion in PJM or any other industry forums indicating plans or changes in plans regarding coal generation units as a result of potential changes to the Environmental Protection Agency (EPA) and associated regulations.

-2-

Refer to the Direct Testimony of Don Mosier (Mosier Direct Testimony) page
lines 21-23 and page 7, lines 1-4 referencing Winter Storms Elliot and Gerri.

a. Discuss how soon the new dispatchable thermal generation can help EKPC avoid being assessed Performance Assessment Intervals penalties (PAIs) as discussed in FERC dockets EL24-12-000 and EL23-74-000 during Winter Storm Elliot.

 b. Describe the financial impacts of these PAIs on EKPC customers.
Include in the response how EKPC will expense the penalties and if recovery in rates will be requested.

c. Explain if EKPC is planning to take any actions in the interim to avoid further PAIs.

Refer to the Mosier Direct Testimony page 10, lines 10-20. On December
13, 2024, PJM submitted in Docket No. ER25-712-000 a filing to modify the tariff for its
Reliability Resource Initiative (RRI).

a. Explain if EKPC plans to submit to PJM the planned Cooper Station CCGT facility or its planned Liberty RICE units as RRI projects.

b. Explain if EKPC supports PJM's effort at FERC to preserve resource adequacy such as the RRI and other related PJM tariff changes.

Refer to the Mosier Direct Testimony page 15, lines 10-22 and page 16, lines
1-2.

a. Explain whether EKPC believes the incoming administration policies could impact the Greenhouse Gas (GHG) Rule that was enacted in April 2024, such as delaying it or reducing its restrictions.

-3-

b. Explain whether EKPC intends to go forward with the planned mix of new resources, described as beneficial to EKPC customers, even if GHG standards for carbon intensity are relaxed.

5. Refer to the Direct Testimony of Julia J. Tucker (Tucker Direct Testimony) page 17, lines 19-22 and Exhibit JJT-4. The Tucker Direct Testimony refers to a short term 350 MW hydro Power Purchase Agreement (PPA) ending in 2025 but containing an option to extend for a longer period of time. Exhibit JJT-4 shows hydro PPA capacity additions of 9 MW in summer 2025 (extending to 2034) and 300 MW in winter 2026 (extending to 2035). In addition, there are seasonal capacity purchases in both summer and winter extending 2025-2030.

a. Explain whether the hydro capacity additions of 9 MW and 300 MW are related to the hydro capacity purchase referenced in the Tucker Direct Testimony. If so, explain how they are related.

b. Explain whether the seasonal capacity purchases over the 2025 2030 forecast period are reliant upon the hydro capacity purchase referenced in the
Tucker Direct Testimony.

6. Refer to the Tucker Direct Testimony, page 9, lines 3-8.

a. Explain if EKPC is expecting any data centers or facilities presenting artificial intelligence computing loads to be located within its service territory between now and 2030. If so, and if possible, provide the anticipated load impact(s) as well as the Company names. If so, explain how EKPC has come to expect those new facilities to be located within the territory. If not, please explain why not.

-4-

b. Confirm whether the 2024 load forecast includes any projected loads for data centers.

c. If not answered in part a or b above, please summarize any discussions or communications that EKPC has had within any industries, economic development representatives, local officials, or rural cooperative members regarding the location of any data centers or artificial intelligence computing loads to potentially be located within its service territory in the next five years.

7. Refer to the Tucker Direct Testimony, Exhibit JJT-4.

Provide a table showing each potential resource's cost and operating characteristics made available to EKPC's resource selection and production cost models.
Include in the response all annual and seasonal PPAs.

b. Explain EKPC's modeling assumptions which determined the degree of flexibility the production cost/portfolio selection model was given to decide the timing of unit retirements and additions (including PPAs).

c. Explain EKPC's modeling assumptions for whether there were any costs related to transmission constraints or transmission upgrades.

d. Explain the modeling assumptions for constraints on PPAs inside and outside EKPC's load zone, and whether any costs regarding supplying natural gas to the Cooper Station for the natural gas combined cycle (NGCC) and co-firing Cooper Unit 2 was included in the modeling.

e. If there are any required transmission upgrades connected with the addition of the natural gas combined cycle (NGCC) or any other generation, explain

-5-

whether the requisite study requests have been submitted to PJM and if so, the projected time table for study completion.

f. Provide a table showing the resource portfolios that were least cost or reasonable least cost from which EKPC selected the resource portfolio identified and represented in Exhibit JJT-4.

8. Refer to the Tucker Direct Testimony, Exhibit JJT-4. Refer also to the Application, page 13, paragraph 29, which indicates that the proposed NGCC unit will serve as a replacement for Cooper 1 Unit by 2031.

a. Explain the causes for the modeled decrease in existing capacity occurring in 2026 and in 2030.

b. Explain whether the seasonal capacity purchases are modeled as separate bilateral contracts or being purchased through the Base Residual Auction (BRA). Include in the response the purchase prices, how they were derived and whether there are any limits on the amount of capacity purchases that can come from outside EKPC's load zone.

9. Refer to the Tucker Direct Testimony page 13, lines 10-14 and page 14, lines 1-22.

a. Explain why the reserve margin is 7 percent.

b. Explain in detail how the 7 percent margin was developed.

c. Explain how PJM's required planning reserve requirement compares to EKPC's 7 percent summer and winter Capacity Planning Reserve Margin and whether the 7 percent is in addition to PJM reserve margin requirements.

-6-

d. The current expansion plan does not include the addition of a large load. In the event that a data center that requires hundreds of MWs but will bring very few jobs commits to locate within EKPC service territory, explain how EKPC would accommodate the load and whether the cost to accommodate the data center would be socialized across EKPC's other retail customers.

10. Refer to the Tucker Direct Testimony, page 15, lines 2-4.

a. Provide the rationale for increasing the reserve margin to three percent.

b. Explain why the original margin was three percent and the reason for the increase to seven percent.

11. Refer to the Tucker Direct Testimony page 17, lines 15-16, page 19, lines 2-4, page 20, lines 12-16, page 22, lines 12-16, and Exhibit JJT-4.

a. Provide the status of the negotiations regarding the long-term hydro energy only contract and the expected effective date.

b. Explain whether there is any relationship between the long term hydro PPA in 2026 and the 300 NW winter 9 MW summer hydro capacity PPA in Exhibit JJT-4. Include in the response whether the supplier of the hydro energy only PPA is the same forecasted supplier of the hydro capacity shown in Exhibit JJT-4.

c. The 9 MW hydro capacity comes online in 2025 and the 300 MW hydro capacity comes online in 2026. Explain whether this is from the same supplier and if not included in this proceeding, when a CPCN will be filed with the Commission to enter into the contract agreement.

Case No. 2024-00370

-7-

Refer to the Tucker Direct Testimony page 18, lines 11-12 and Exhibit JJT 4.

a. Explain why Seasonal Purchases are excluded from the Planning Reserve calculations. Include in the response the extent to which PJM allows EKPC to include seasonal capacity purchases to count toward required planning reserve margins.

b. Explain why only the summer capacity has an effective load carrying capability (ELCC) adjusted.

c. Explain why 6 percent of the long-term load forecast (LTLF) is excluded from the summer peak.

13. Refer to the Tucker Direct Testimony page 19, lines 8-15. Explain how the specific environmental regulations were modeled in the resource selection and production cost / portfolio selection analyses.

14. Refer to the Tucker Direct Testimony page 19, lines 8-13.

a. Explain how the impacts of environmental regulations were modeled in EnCompass's portfolio production cost modeling phase to arrive at its current expansion plan as shown in Exhibit JJT-4.

b. Explain whether a scenario was run where the current environmental regulations were repealed at a later date due to a changing political climate. If so, explain whether and how that may or may not affect EKCP's expansion plans.

15. Refer to the Tucker Direct Testimony page 21, lines 7-10. Explain the ELCC winter and summer rating of the combined cycle gas turbine (CCGT).

16. Refer to the Tucker Direct Testimony page 23, lines 20-23 and page 24, lines 1-7.

-8-

a. Explain how EKPC's development of solar projects overcomes third party solar developer's project completion issues.

b. To the extent that financing is an issue, explain EKPC's advantages over project developers.

c. To the extent that supply chain is an issue, explain EKPC's advantages over project developers.

17. Refer to the Tucker Direct Testimony, pages 24-25, lines 21-4.

a. Explain what PJM requires to be a reliability pricing model (RPM) entity.

b. Considering EKPC is currently projected to have a capacity deficit, explain how EKPC is currently meeting its PJM RPM requirements.

18. Refer to the Tucker Direct Testimony page 25, lines 1-12.

a. Explain why and when PJM would call the 2X1 CCGT to run as a single CT only.

b. Explain whether the separate CCGT modes were modeled separately in the EnCompass model.

c. If not addressed in the response to parts a or b above, explain how the EnCompass model treated the separate CCGT modes. Include in the response whether the EnCompass model was allowed to and did dispatch the CCGT modes separately.

19. Refer to the Tucker Direct Testimony page 26, lines 16-23, page 27, lines1-2, and Exhibit JJT-5.

-9-

a. Explain the modeling assumptions and supporting calculations in excel spreadsheet format with all cells visible and unprotected. Include in the explanation whether the Exhibit is the product of or derived from the EnCompass model.

b. If not provided in the response to part a above, explain and provide the cost and operating characteristics of each potential resource (including PPAs) made available to the EnCompass model. Include also whether the model was allowed to retire a unit as opposed to cofiring a unit or whether cofiring was assumed to be a base assumption for the model.

20. Refer to the Tucker Direct Testimony page 26, line 12.

a. Explain in greater detail what is meant by the phrase "perilously close."

b. Provide whether EKPC had any load shedding programs in effect during this period.

c. Explain if any load shedding programs were considered or implemented after this time.

21. Refer to the Tucker Direct Testimony page 26, lines 16-23, page 27, lines 1-2, and Exhibit JJT-5.

a. Explain what assumptions or restrictions were placed on the EnCompass model to create the cofiring savings for the CCGT, Cooper Unit 2 and all Spurlock station units. Include in the response whether and how assumptions differed across the analyses. As one example, forecasts of energy prices (PJM LMPs), coal, and natural gas prices the same for all CCGT, Cooper and Spurlock cofiring analyses, but capacity factors and ELCC ratings were different.

-10-

b. Within the modeling for Cooper Unit 2, explain whether the model burned 100 percent natural gas post-cofiring or whether the model could and did run the unit with some combination of coal and natural gas or fuel oil.

c. Explain how Cooper Unit 2's worth of over \$117 million changes if it is not run at 100 percent natural gas.

22. Refer also to the Direct Testimony of Brad Young (Young Direct Testimony), page 16, lines 5-8. Explain whether the model ran the Spurlock units at the full 50 percent natural gas or something less. If less of a percentage, provide the range with which the model ran each Spurlock and Cooper unit with coal and natural gas.

23. Refer to the Tucker Direct Testimony page 26, lines 16-23, page 27, lines 1-2, and Exhibit JJT-5 and the Young Direct Testimony, page 18, lines 9-11. It appears based on the testimony submitted, that if the GHG regulations are in effect, then cofiring would be the fastest way to maintain generation capacity because new build units can't be built fast enough for the entire industry to comply. This premise implies that the demand for natural gas would increase natural gas prices (including new gas pipeline construction). Coal prices would also undergo some adjustment.

a. Explain the assumptions used in forecasting coal and natural gas prices.

b. Explain whether the same coal and natural gas forecasts were used in both the With GHG regulations scenarios and the Without the GHG regulations scenarios. If not, explain the differences.

Case No. 2024-00370

-11-

24. Refer to the Tucker Direct Testimony and Exhibit JJT-5. Provide details and calculations that were utilized to determine the net cost benefits for the years 2029 through 2039.

25. Refer to the Tucker Direct Testimony page 27, lines 1-2, page 29, lines 15-16, and page 34, lines 1-2. Provide EKPC's capacity market benefits with the Spurlock units and the Cooper units based on BRA clearing prices from the previous 10-years.

26. Refer to the Young Direct Testimony, Attachment BY-1, Appendix R.

a. The estimated cost of the 775 MW Combined Cycle Gas Turbine (CCGT) is \$1.317 million, which equates to \$1,705 per kw. The March 2023 Energy Information Administration (EIA) Cost and Performance characteristics of New Generating Technologies indicates that the expected cost for constructing this facility in the Kentucky region is \$1,124 per kW, which would result in a total cost of \$871 million. Provide a detailed rationale for this differential.

b. The cost estimates for the new natural gas pipeline and M&R station are not included in the \$1.317 million CCGT estimate. Provide a detailed cost estimate and financially responsible party.

27. Provide the anticipated impact the Cooper CCGT project will have on residential customer rates from 2029 through 2030.

28. Describe and quantify the impact the Cooper Unit 2 Co-Firing Project will have on the following operating criteria:

a. The unit's net generating capacity.

b. The unit's North American Electric Reliability Corporation (NERC) maximum and minimum dependable capacity for winter.

-12-

c. The unit's NERC maximum and minimum dependable capacity for

summer.

- d. The unit's heat rate for both winter and summer.
- e. The ramp rate.
- f. The unit's SO₂ emissions.
- g. The unit's NO_x emissions
- h. The unit's CO₂ emissions.
- i. The unit's particulate emissions.
- j. The unit's wastewater discharge.
- k. Coal Combustion Residuals (CCR).
- I. Variable Operating and Maintenance Costs.

29. Provide the most recent condition assessment of the Cooper Unit 2 boiler including the following systems:

- a. Burners
- b. Ignitors
- c. Burner Management System
- d. Boiler drum
- e. Water wall tubes
- f. Superheater sections
- g. Economizer sections
- h. Desuperheater control
- i. Auxiliary boiler

30. Provide the most recent condition assessment of the Cooper Unit 2 feedwater system including the following systems:

- a. Boiler feed pumps
- b. Condensate water pumps
- c. Low pressure feedwater heaters
- d. High pressure feedwater heaters
- e. Deaerator
- f. Feedwater control system

31. Describe the anticipated impact the Cooper Unit 2 co-firing project will have on residential customer rates from 2029 through 2039.

32. Describe and quantify the impact the Spurlock Unit 1 co-firing project will have on the following operating criteria:

- a. The unit's net generating capacity.
- b. The unit's NERC maximum and minimum dependable capacity for

winter.

c. The unit's NERC maximum and minimum dependable capacity for

summer.

- d. The unit's heat rate for both winter and summer.
- e. The ramp rate.
- f. The unit's SO₂ emissions.
- g. The unit's NO_x emissions
- h. The unit's CO₂ emissions.
- i. The unit's particulate emissions.

- j. The unit's wastewater discharge.
- k. Coal Combustion Residuals (CCR).
- I. Variable Operating and Maintenance Costs.
- 33. Provide the most recent condition assessment of the Spurlock Unit 1 boiler including the following systems:
 - a. Burners
 - b. Ignitors
 - c. Burner Management System
 - d. Boiler drum
 - e. Water wall tubes
 - f. Superheater sections
 - g. Economizer sections
 - h. Desuperheater control
 - i. Auxiliary boiler

34. Provide the most recent condition assessment of the Spurlock Unit 1 feedwater system including the following systems:

- a. Boiler feed pumps
- b. Condensate water pumps
- c. Low pressure feedwater heaters
- d. High pressure feedwater heaters
- e. Deaerator
- f. Feedwater control system

35. Describe the anticipated impact the Spurlock Unit 1 co-firing project will have on residential customer rates from 2029 through 2039.

36. Describe and quantify the impact the Spurlock Unit 2 co-firing project will have on the following operating criteria:

a. The unit's net generating capacity.

b. The unit's NERC maximum and minimum dependable capacity for

winter.

c. The unit's NERC maximum and minimum dependable capacity for

summer.

- d. The unit's heat rate for both winter and summer.
- e. The ramp rate.
- f. The unit's SO₂ emissions.
- g. The unit's NO_x emissions
- h. The unit's CO₂ emissions.
- i. The unit's particulate emissions.
- j. The unit's wastewater discharge.
- k. Coal Combustion Residuals (CCR).
- I. Variable Operating and Maintenance Costs.

37. Provide the most recent condition assessment of the Spurlock Unit 2 boiler

including the following systems:

- a. Burners
- b. Ignitors
- c. Burner Management System

- d. Boiler drum
- e. Water wall tubes
- f. Superheater sections
- g. Economizer sections
- h. Desuperheater control
- i. Auxiliary boiler

38. Provide the most recent condition assessment of the Spurlock Unit 2 feedwater system including the following systems:

- a. Boiler feed pumps
- b. Condensate water pumps
- c. Low pressure feedwater heaters
- d. High pressure feedwater heaters
- e. Deaerator
- f. Feedwater control system

39. Describe the anticipated impact and anticipated timing the Spurlock Unit 2 co-firing project will have on ratepayers from 2030 through 2038. If the impact is not known, explain the process by which EKPC intends to estimate the impact to ratepayers.

40. Describe and quantify the impact the Spurlock Unit 3 co-firing project will have on the following operating criteria:

a. The unit's net generating capacity.

b. The unit's NERC maximum and minimum dependable capacity for winter.

-17-

c. The unit's NERC maximum and minimum dependable capacity for

summer.

- d. The unit's heat rate for both winter and summer.
- e. The ramp rate.
- f. The unit's SO₂ emissions.
- g. The unit's NO_x emissions
- h. The unit's CO₂ emissions.
- i. The unit's particulate emissions.
- j. The unit's wastewater discharge.
- k. Coal Combustion Residuals (CCR).
- I. Variable Operating and Maintenance Costs.

41. Provide the most recent condition assessment of the Spurlock Unit 3 boiler

including the following systems:

- a. Burners
- b. Ignitors
- c. Burner Management System
- d. Boiler drum
- e. Water wall tubes
- f. Superheater sections
- g. Economizer sections
- h. Desuperheater control
- i. Auxiliary boiler

42. Provide the most recent condition assessment of the Spurlock Unit 3 feedwater system including the following systems:

- a. Boiler feed pumps
- b. Condensate water pumps
- c. Low pressure feedwater heaters
- d. High pressure feedwater heaters
- e. Deaerator
- f. Feedwater control system

43. Describe the anticipated impact the Spurlock Unit 3 co-firing project will have on residential customer rates from 2029 through 2039.

44. Describe and quantify the impact the Spurlock Unit 4 co-firing project will have on the following operating criteria:

- a. The unit's net generating capacity.
- b. The unit's NERC maximum and minimum dependable capacity for

winter.

c. The unit's NERC maximum and minimum dependable capacity for

summer.

- d. The unit's heat rate for both winter and summer.
- e. The ramp rate.
- f. The unit's SO₂ emissions.
- g. The unit's NO_x emissions
- h. The unit's CO₂ emissions.
- i. The unit's particulate emissions.

- j. The unit's wastewater discharge.
- k. Coal Combustion Residuals (CCR).
- I. Variable Operating and Maintenance Costs.
- 45. Provide the most recent condition assessment of the Spurlock Unit 4 boiler including the following systems:
 - a. Burners
 - b. Ignitors
 - c. Burner Management System
 - d. Boiler drum
 - e. Water wall tubes
 - f. Superheater sections
 - g. Economizer sections
 - h. Desuperheater control
 - i. Auxiliary boiler

46. Provide the most recent condition assessment of the Spurlock Unit 4 feedwater system including the following systems:

- a. Boiler feed pumps
- b. Condensate water pumps
- c. Low pressure feedwater heaters
- d. High pressure feedwater heaters
- e. Deaerator
- f. Feedwater control system

47. Describe the anticipated impact the Spurlock Unit 4 co-firing project will have on residential customer rates from 2029 through 2039.

48. Refer to the Direct Testimony of Craig A. Johnson (Johnson Direct Testimony), page 4, lines 18-23. Explain whether the water from the cooling tower will be cycled back for reuse by the CCGT steam turbine.

49. Refer to the Johnson Direct Testimony, page 9, 7-11 and page 10, lines 1-2. If the CCGT capacity factor is limited to 40 percent under the GHG regulation, explain the anticipated capacity factor if the GHG regulation is struck down or sent back to the EPA for revision.

50. Refer to the Johnson Direct Testimony, page 9, lines 18-19 and page 10, lines 12-15.

a. Explain whether the statement means that Cooper Unit 2 will burn natural gas as the primary fuel and coal will be added to the fuel mix only when gas supply is constrained, or coal is relatively more economic.

b. Explain whether the same is true for the Spurlock units in that under normal market conditions, EKPC anticipates operating the Spurlock units with 50/50 coal / natural gas fuel blend.

51. Refer to the Johnson Direct Testimony, page 10, lines 20-21 and page 12, lines 12-15. The statement on page 10 indicates that Spurlock units will be cofired up to 50 percent natural gas. The statement on page 12 indicates a minimum of 50 percent natural gas cofiring. Reconcile the two statements for each Spurlock unit.

52. Refer to the Johnson Direct Testimony, page 9, lines 22-23.

-21-

a. Explain whether the predicted percent degradation in heat rate for Cooper Unit 2 means that the cost of energy bid into the PJM energy market will be slightly higher or that the unit may be called upon to run less.

b. Explain whether the Spurlock units will experience a similar degradation in heat rate and energy market competitiveness.

53. Refer to the Direct Testimony of Darrin Adams, (Adams Direct Testimony), pages 7-9. Absent the construction of the CCGT at Cooper station, explain whether any of the transmission projects identified that EKPC would be responsible for completing are in EKCP's five-year construction workplan currently. Include in the response when each project is scheduled to begin, to be completed and identify the project.

54. Refer to the Direct Testimony of Darrin Adams, (Adams Direct Testimony), Attachment DA-1, Table 4.1 pages 10-11 and Table 4.2, page 12. To the extent that Louisville Gas & Electric (LG&E) and Kentucky Utilities Company (KU) (jointly, LG&E/KU) are required to complete the transmission projects associated with its transmission system, explain whether EKPC will be responsible for paying the cost of the upgrades on LG&E/KU systems.

55. Refer to the Direct Testimony of Jerry B. Purvis (Purvis Direct Testimony), page 10, lines 21-23.

a. Explain if EKPC's choice to co-fire Cooper Unit 2 and Spurlock Units 1-4 with 40 percent natural gas means that EKPC anticipates the Spurlock Units 1-4 and Cooper Unit 2 will burn no more than 40 percent natural gas (and 60 percent coal) or does EKPC anticipate burning up to 100 percent natural gas.

-22-

b. If EKPC's choice to co-fire Spurlock Units 1-4 and Cooper Unit 2 means neither of these items in response a., explain.

c. Explain if EKPC believes that the response in a. is there will be no impact to the PJM unit capacity rating under either scenario. If EKPC believes there would be an impact to the PJM unit capacity rating, explain the impact and why.

d. If there is an affect on the PJM capacity rating, explain what environmental measures would have to be undertaken to maintain the load factor over 40 percent.

56. Refer to the Direct Testimony of Mark Horn (Horn Direct Testimony), page 7, lines 1-8. Provide a description of how the Risk Factor and Weighting were assigned for each of the parameters listed.

57. Provide the current status of the existing energy efficiency programs, including the following:

a. Button-Up Weatherization Program (residential)

b. CARES Low-Income Weatherization (residential)

c. Heat Pump Retrofit Program (residential)

d. Touchstone Energy Program (residential)

e. Direct Load Control of Air Conditioners and Water Heaters: Switches and Bring Your Own Thermostat (BYOT) (residential)

f. EV Off-Peak Charging Program (residential)

58. Refer to the Direct Testimony of Scott Drake (Drake Direct Testimony), page 13, lines 8-17. Provide the avoided costs used to determine the cost-effectiveness

-23-

of the demand-side management (DSM) programs along with cost justification for the avoided costs.

59. Refer to Drake Direct Testimony, page 17. Explain how EKPC's low-income program has a cost-effectiveness score of 3.46 when low-income programs tend to be not cost effective.

60. Refer to Drake Direct Testimony, Attachment SD-8.

a. Provide a total DSM revenue requirement for all current and proposed programs. Include in the response a total DSM revenue requirement broken out by residential and non-residential.

b. Provide the current DSM rates that each cooperative charges on a per kWh basis. Include in the response the new proposed DSM rates along with a dollar per kWh difference between the current and proposed rates.

c. Explain how EKPC currently recovers its DSM related program costs, shared savings, and/or potential lost revenues.

Lind B

Linda C. Bridwell, PE Executive Director Public Service Commission P.O. Box 615 Frankfort, KY 40602

DATED ______ DEC 20 2024 _____

cc: Parties of Record

*L. Allyson Honaker Honaker Law Office, PLLC 1795 Alysheba Way Suite 1203 Lexington, KENTUCKY 40509

*Angela M Goad Assistant Attorney General Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204

*Brittany H. Koenig Honaker Law Office, PLLC 1795 Alysheba Way Suite 1203 Lexington, KENTUCKY 40509

*Greg Cecil East Kentucky Power Cooperative, Inc. 4775 Lexington Road P. O. Box 707 Winchester, KY 40392-0707

*Heather Temple Honaker Law Office, PLLC 1795 Alysheba Way Suite 1203 Lexington, KENTUCKY 40509

*Jacob Watson East Kentucky Power Cooperative, Inc. 4775 Lexington Road P. O. Box 707 Winchester, KY 40392-0707

*Jody Kyler Cohn 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

*Lawrence W Cook Assistant Attorney General Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204

*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

*East Kentucky Power Cooperative, Inc. 4775 Lexington Road P. O. Box 707 Winchester, KY 40392-0707