## COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

## In the Matter of:

| APPLICATION OF EAST KENTUCKY POWER | )  |            |
|------------------------------------|----|------------|
| COOPERATIVE, INC. TO TRANSFER      | )  | CASE NO.   |
| FUNCTIONAL CONTROL OF CERTAIN      | )  | 2012-00169 |
| TRANSMISSION FACILITIES TO PJM     | j) |            |
| INTERCONNECTION, INC.              | )  |            |

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

East Kentucky Power Cooperative, Inc. ("East Kentucky"), pursuant to 807 KAR 5:001, is to file with the Commission the original and ten copies of the following information, with a copy to all parties of record. The information requested herein is due on or before June 28, 2012. Responses to requests for information shall be appropriately bound, tabbed and indexed. 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.

East Kentucky shall make timely amendment to any prior response if it obtains information which indicates that the response was incorrect when made or, though correct when made, is now incorrect in any material respect. For any request to which

East Kentucky fails or refuses to furnish all or part of the requested information, it 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.

- 1. Refer to East Kentucky's Application ("Application"), page 6, paragraph 11, which states, "EKPC thereafter tendered written questions to PJM that touched upon organizational, operational and financial aspects of the integration process and subsequent participation in PJM." Provide copies of the written questions submitted by East Kentucky and the responses thereto by PJM Interconnection, LLC ("PJM").
- 2. Refer to the Application, page 6, paragraph 12, and the Direct Testimony of Anthony S. Campbell page 8.
- a. Provide a copy of the Charles River Associates March 13, 2012 presentation to the East Kentucky Board.
- b. Provide a copy of the PJM related material considered by the Board Risk Oversight Committee at its November 2011 meeting and any materials provided by the two visiting G&Ts related to the pros and cons of operating inside a RTO.
- 3. Refer to the Application, page 8, paragraph 16, which states, "[f]inally, PJM also manages a sophisticated regional planning process for transmission expansion to ensure the continued reliability of the electric system." Provide the following:

- a. Does East Kentucky currently have employees performing the regional planning process for the transmission expansion of East Kentucky's transmission system to ensure the continued reliability of its electric system?
- b. If yes, what is the number of employees and the annual cost associated with this function?
- c. Will East Kentucky continue to incur any cost for the transmission planning process in Kentucky if it joins PJM?
- 4. Refer to the Application, page 14, paragraph 32, which states, "EKPC will continue as a member of the TEE Contingency Reserve Sharing Group ("TCRSG") which assures that no harm comes to any ratepayers of the other members of the TCRSG." Provide the following:
- a. Explain whether PJM tariffs expressly authorize a transmission owner to be a party to a contract with non-PJM members for purposes of sharing reserves such as is provided for under the TCRSG. If no, will PJM need to file a tariff to authorize East Kentucky's continued participation in the TCRSG?
- b. The amount, in kW or kWh, which East Kentucky relied upon or supplied resources associated with the TCRSG for each of the last five years.
- c. The amount of any revenue and expense that East Kentucky incurred as a result of being a member of the TCRSG for each of the last five years.
- d. Whether East Kentucky expects to receive any revenues associated with the TCRSG once it is a full member of PJM.
- e. Whether East Kentucky expects to incur any expenses associated with the TCRSG once it is a full member of PJM.

- f. Provide copies of any written or electronic correspondence that references the Tennessee Valley Authority ("TVA"), the TCRSG, and East Kentucky's proposed membership in PJM.
- 5. Refer to the Application, pages 14-15, paragraph 32. Explain how "Participation in PJM through the rights and benefits afforded to transmission owners and generation owners will allow East Kentucky to position itself to efficiently comply with existing and anticipated federal obligations imposed by the U.S. Environmental Protection Agency (EPA) and the Federal Energy Regulatory Commission (FERC)."
- 6. Refer to the Application, page 15, paragraph 34, and footnote 21. Explain how and why East Kentucky members will always be able to purchase power at East Kentucky's avoided cost and how that avoided cost is calculated.
- 7. Refer to the Application, page 9, paragraph 19, and the Direct Testimony of Don Mosier, pages 5-6 and 15.
- a. Explain whether East Kentucky will need to construct additional transmission capacity to allow it to fully participate in PJM's markets.
- b. Explain why and how East Kentucky's excess energy will be able to be sold more efficiently due to less frequent transmission constraints.
- c. Explain why and how East Kentucky's capacity reserve margin can be reduced by approximately 70 MW.
- d. If not addressed above, explain whether the 94 MW that East Kentucky holds back as part of its current reserve sharing arrangement is counted as part of the 360 MW capacity reserve margin.

- e. If not addressed above, explain how East Kentucky calculated that an additional 70 MW that could be offered into the PJM capacity market.
- f. Explain what East Kentucky's capacity reserve margin will be and how East Kentucky will meet its capacity reserve margin requirements after becoming a fully integrated PJM member.
- 8. Refer to Mosier Testimony, page 6. Explain whether the lack of firm transmission capacity paths with TVA, Louisville Gas and Electric Company, and Kentucky Utilities Company are the result of existing line loading, which would limit the ability of those utilities to provide adequate firm transmission capacity to East Kentucky.
  - 9. Refer to Mosier Testimony, page 14.
- a. Explain how East Kentucky determines the offer price for its generation that is to be bid into both the capacity and the energy markets; i.e., what East Kentucky costs are included in each of the offer bids.
- b. Explain whether the capacity and energy from each East Kentucky generating unit is bid into the capacity and energy markets separately and, if not, why not.
  - 10. Refer to Mosier Testimony, pages 14-15 and 19-24.
- a. Explain what pricing zone(s) East Kentucky will be assigned and what other utilities are in the zone(s)
- b. If known, explain and discuss the types of generation that set prices in the energy markets and the extent to which it is time sensitive.

- c. If known, explain and describe the energy and capacity market zones into which East Kentucky will be assigned including principle economic and demographic drivers behind recent market clearing prices.
- d. If known, explain and discuss the reasons for and the issues surrounding the recent price spike in the PJM capacity market.
- e. Explain whether the recent PJM capacity price spike would have affected East Kentucky if it had already been a fully integrated member of PJM and, if so, how.
- 11. If known, explain how and the extent to which East Kentucky anticipates that each of its generation units will be dispatched and in what order, generally.
- 12. Explain whether East Kentucky expects natural gas prices to remain low and, if yes, the anticipated effects of continuing low gas prices on East Kentucky's unit dispatch order.
- 13. Explain the extent to which East Kentucky anticipates that, as a PJM member, its natural gas combustion turbines will be run as peaking units only or run during other times as well.
- 14. If East Kentucky integrates into PJM and participates in the RPM market, explain the operational and financial ramifications of a forced outage to a unit already scheduled to be dispatched and run.
- 15. If known, explain the degree to which East Kentucky's full integration into PJM assists PJM (or neighboring PJM members in the relevant pricing zone) with reliability issues regarding environmental compliance, maintenance outage scheduling and etc.

- 16. Refer to the Mosier Testimony, pages 24 and 27-29.
- a. Has East Kentucky been in contact with all its existing interruptible load customers about participating in PJM's Demand Response program and, if so, what have been the preliminary responses?
- b. Provide any analysis that East Kentucky has which demonstrates whether membership in PJM will impact the frequency or duration of interruptions for customers participating in the Direct Load Control Program.
- c. Explain in detail how and why the terms of these programs will change if East Kentucky is a member of PJM.
- 17. Refer to the Direct Testimony of Mike McNalley ("McNalley Testimony"), page 7, lines 9 through 11, where it states, "[f]irst, we think these savings will help offset increased costs in other areas of our business, such as environmental compliance expenses." Provide the following:
- a. Were the Long-Term Firm PTP Transmission Charges included as an expense when East Kentucky's current base rates were established?
- b. Will the savings associated with Avoided Long-Term Firm PTP Transmission Charges flow to the ratepayers only after the conclusion of a new base rate case for East Kentucky? If no, explain how the savings will flow to ratepayers without a base rate case.
- c. Does East Kentucky agree that a change in level of revenue or expense is not reflected in its environmental surcharge unless that revenue or expense account was previously authorized to be recovered under the environmental surcharge?
  - 18. Refer to the McNalley Testimony, Exhibit MM-1, year 2017.

- a. Explain whether the PJM reserve margin of approximately 2.8 percent or approximately 70 MW will be added on top of the approximate 2,500 MW summer peak.
- b. Explain whether for the year 2017, the summer peak of 2,500 MW and the installed generating capability of approximately 3,100 results in a generating reserve margin of 24 percent [(3,100 MW 2,500 MW) / 2,500 MW].
- c. Explain whether with its generating capability of approximate 3,100 MW, East Kentucky's summer peak could grow to approximately 3,015 MW, and still maintain its 2.8 percent PJM required reserve margin.
- 19. Refer to the McNalley Testimony, Exhibit MM-2, year 2015, Total Saving-RPM. Provide the following:
- a. An explanation why the amount declined to \$9.3 million when in 2014 it was \$14.3 million and in 2016 it is \$14.8 million.
- b. Exhibit MM-2 in electronic format with formula unprotected and intact.
- 20. Refer to the Direct Testimony of Ralph L. Luchiani ("Luchiani Testimony"), Exhibit RLL-2, page 5 of 49, Table 1. Provide the following:
- a. The amount of benefit associated with adjusted production costs as it relates to fuel costs that will flow to the members by way of the fuel adjustment factor.
- b. The amount of benefit associated with adjusted production costs as it relates to variable operation and maintenance costs that will flow to the members by way of a base rate proceeding.

- c. The amount of benefit associated with adjusted production costs as it relates to emission costs that will flow to the members by way of the environmental surcharge.
- d. An explanation of how the benefit associated with adjusted production costs as it relates to East Kentucky's "off-system" purchased power costs net of excess energy sales revenue will flow to the members.
- e. An explanation of whether the benefits or the costs reflected on Table 1 associated with Administrative Costs, Transmission Costs, PJM Capacity Market Impacts and Avoided Long-Term Firm PTP Transmission Charges will flow to the members only after East Kentucky has a base rate proceeding.
- f. The benefits and costs for the 2013-2022 present value column broken down by fuel adjustment clause, environmental surcharge, and base rates.
- 21. Refer to the Luchiani Testimony, Exhibit RLL-2, page 13 of 49, Table 4. Provide an explanation to the reasons for the drop in GWH sales between the StatusQuo column and the Join PJM column.
- 22. Refer to the Luchiani Testimony, Exhibit RLL-2, page 14 of 49, Table 5. Provide an explanation to the reasons for the drop in GWH sales between the StatusQuo column and the Join PJM column.
- 23. Refer to the Luchiani Testimony, Exhibit RLL-2, page 24 of 49, Table 9. Provide the following explanation:
- a. The reasons for the Production Cost Savings for joining PJM to decline from \$30.2 million in 2013 to \$15.8 million in 2022.

- b. The reasons for the Purchases Cost Savings for joining PJM to increase from (\$14.6) million in 2013 to \$4.3 million in 2022.
- c. The reasons for the Sales Revenue Cost Savings for joining PJM to increase from (\$11.4) million in 2013 to (\$6.6) million in 2022.
- 24. Refer to the Application, page 17, paragraph 37, which states, "Moreover, East Kentucky will only be able to maximize its capacity benefits if it is permitted to enroll its interruptible load and Direct Load Control resources in PJM's Limited Demand Response Program."
- a. Explain in detail how interruptible load and Direct Load Control resources will be enrolled in the Limited Demand Response Program.
- b. Provide a chart that shows for 2012 and each of the past five years the frequency, duration, and number of megawatt hours of load curtailed on East Kentucky's system.
- c. Explain whether East Kentucky will be participating in the PJM Limited Demand Response Program on behalf of its members' interruptible customers, or whether East Kentucky is proposing that the retail customers be authorized to participate directly in the PJM program.
- d. Explain whether East Kentucky is proposing that its members' interruptible customers be authorized to resell into PJM the power that those customers purchased from an East Kentucky member.
- 25. Refer to the Application, page 14, paragraph 32, which references the TEE Contingency Reserve Sharing Group ("TCRSG").

- a. What benefits, if any, will accrue to the other members of this TCRSG?
- b. How will PJM deal with the members of the TCRSG which are not members of PJM?
- 26. Explain in detail the benefits to East Kentucky for participating in PJM's Reliability Pricing Model ("RPM") as opposed to participating only in the Energy Market and choosing Fixed Resource Requirements ("FRRs"). The explanation should include a discussion of East Kentucky's required reserve margin in MWs for the summer season and the winter season under RPM and under FRR.
- 27. Refer to the Application, page 16, paragraph 37. Explain the term "installed planning reserve margin," how it is calculated, and whether it differs from East Kentucky's current methodology to calculate its target reserve margin.
- a. How do the installed planning reserves differ from the current PJM's Board's approved Installed Reserve Margin ("IRM")?
  - b. What is the current PJM Board approved IRM?
  - c. Explain how is the IRM calculated?
- d. Explain how does IRM differ from installed planning reserve margin?
- 28. Explain in detail all of the transmission planning functions that would be provided to East Kentucky by PJM's transmission engineering planning staff and the impacts of PJM membership on East Kentucky's transmission planning and operations planning engineering staff.

Executive Director

Public Service Commission

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cc: Parties of Record

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