COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

CONSIDERATION OF THE)
REQUIREMENTS OF THE FEDERAL) ADMINISTRATIVE
ENERGY POLICY ACT OF 2005) CASE NO. 2006-00045
REGARDING TIME-BASED METERING,)
DEMAND RESPONSE, AND)
INTERCONNECTION SERVICE)

COMMISSION STAFF'S SECOND INFORMATION REQUEST

Big Rivers Electric Corporation ("Big Rivers") and its Member Systems, East Kentucky Power Cooperative, Inc. ("East Kentucky") and its Member Systems, Kentucky Power Company ("Kentucky Power"), Louisville Gas and Electric Company ("LG&E"), Kentucky Utilities Company ("KU"), and The Union Light, Heat and Power Company ("ULH&P"), pursuant to 807 KAR 5:001, are requested to file with the Commission the original and 7 copies of the following information, with a copy to all parties of record. The information requested is due April 27, 2006. When a number of sheets are required for an item, each sheet should be appropriately indexed, for example, Item 1(a), Sheet 2 of 6. Include with each response the name of the person who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to ensure that it is legible. Where the information requested has been previously provided, in the requested format, reference may be made to the specific location of that information in responding to this information request.

Big Rivers and its Member Systems are to respond to the following guestions:

- 1. Refer to page 2 of the introductory comments filed by Big Rivers and its Member Systems, specifically the discussion of Big Rivers' wholesale power costs under its contract with LG&E Energy Marketing ("LEM").
- a. Are Big Rivers and LEM in the process of terminating that contract and, pursuant to that termination, will Big Rivers resume responsibility for the operation of its generating facilities?
- b. If the answer to 1(a) is yes, upon resumption of responsibility for operating those generating facilities, will Big Rivers' cost of power from its own generation continue to be based on a flat energy charge like that currently in place under the LEM contract? Explain the response.
- 2. Refer to Big Rivers' and the Member Systems' response to Item 1 of the "Smart Metering" requests in Appendix C of the Commission's February 24, 2006 Order.
 - a. When did Big Rivers withdraw the Time-of-Day Rate tariff?
- b. Provide the number of customers opting for the Time-of-Day Rate tariff and the amount of load of such customers during the period the tariff was in effect.
- 3. Refer to page 3 of the introductory comments filed by Big Rivers and its Member Systems, specifically the concerns about communications systems. The comments state that those "systems <u>may</u> not be as robust as in the more urban areas of the state and not as capable of supporting these communications." (Emphasis added). Are there specific limitations of the communications systems of which Big Rivers and its Member Systems are aware, or does the concern reflect what is unknown, i.e., a lack of information on the communications systems? Explain the response.

- 4. Refer to the March 23, 2006 response A-2 of LG&E and KU to Item 2 of the "Smart Metering" requests, which refers to simple seasonal rates, and to the first bullet under Residential and Small Commercial of the same response. Do Big Rivers and its Member Systems share the same view regarding simple seasonal rates? Explain the response.
- 5. Provide a brief discussion relative to Big Rivers' and its Member Systems' Demand-Side Management ("DSM") programs and explain if and how potential demand response resources are considered in your integrated resource planning process.
- 6. Refer to the response to Item 2 of the "Interconnection" requests in Appendix C of the Commission's February 24, 2006 Order.
- a. Describe any interconnection standard currently utilized by Big Rivers and its Member Systems.
- b. Does the current standard differentiate between small generators of10 MVA and below, and those generators above 10 MVA? Explain the response.
- 7. Refer to the response to Item 3 of the "Interconnection" requests in Appendix C of the Commission's February 24, 2006 Order. Refer also to the March 23, 2006 response of LG&E and KU to the same Commission request, which refers to customers with "open transition" switched generation that operates separately from the distribution grid.
- a. Do Big Rivers and its Member Systems require customers to obtain their authorization to have such "open transition" switched generation arrangements for operational purposes? Explain the response.

- b. How many customers and what amount of such generation do Big Rivers and its Member Systems customers operate and to what extent have Big Rivers and its Member Systems inquired about and/or pursued the potential for having access to this generation at times of peak demand or extreme emergency on its system? Explain the response. If you do not have full knowledge in this area, provide whatever information you have.
- c. Would Big Rivers and its Member Systems see any value in a program encouraging these customers (through the provision of bill credits, for example) to utilize this generation voluntarily to meet their needs and free up utility resources during periods of peak demand or extreme emergency? Explain the response. If yes, describe what actions would need to be taken to allow for such a program.

East Kentucky and its Member Systems are to respond to the following questions:

- 8. Refer to East Kentucky's response to Item 1 of the "Smart Metering" requests in the Commission's February 24, 2006 Order. Identify the Member Systems that have implemented each of the rates under I. Time-of-Day Rate Options (pages 2-5 of 10) and II. Demand-Side Management Options (pages 5-10 of 10).
- 9. Refer to page 5 of 10 of the response to Item 1 of the "Smart Metering" requests in the Commission's February 24, 2006 Order. Describe the specific nature of the time-of-day rate and research experimental project, the costs associated with it, and the reason it was not continued beyond 1986-1987.
- 10. Refer to the March 23, 2006 response A-2 of LG&E and KU to Item 2 of the "Smart Metering" requests, which refers to simple seasonal rates, and to the first

bullet under Residential and Small Commercial of the same response. Do East Kentucky and its Member Systems share the same view regarding simple seasonal rates? Explain the response.

- 11. Refer to page 5 of 5 of the response to Item 4 of the "Smart Metering" requests in the Commission's February 24, 2006 Order. The last recommendation of East Kentucky and its Member Systems to the Commission is, "Encourage, but do not mandate, utilities to offer time-of-day rates to residential customers." Other utilities, in their data responses, suggest that the Commission should consider experimental pilot programs regarding time-of-day rates for residential customers. Are East Kentucky and its Member Systems opposed to such programs? Explain the response.
- 12. Provide a brief discussion relative to the DSM programs of East Kentucky's Member Systems and explain if and how potential demand response resources are considered in your integrated resource planning process.
- 13. Refer to the response to Item 3 of the "Interconnection" requests in the Commission's February 24, 2006 Order. Refer also to the response of LG&E and KU to the same Commission request, which refers to customers with "open transition" switched generation that operates separately from the distribution grid.
- a. Do East Kentucky and its Member Systems require customers to obtain their authorization to have such "open transition" switched generation arrangements for operational purposes? Explain the response.
- b. How many customers and what amount of such generation do East Kentucky and its Member Systems customers operate and to what extent have East Kentucky and its Member Systems inquired about and/or pursued the potential for

having access to this generation at times of peak demand or extreme emergency on its system? Explain the response. If you do not have full knowledge in this area, provide whatever information you have.

- c. Would East Kentucky and its Member Systems see any value in a voluntary program encouraging these customers (through the provision of bill credits, for example) to utilize this generation voluntarily to meet their needs and free up utility resources during periods of peak demand or extreme emergency? Explain the response. If yes, describe what actions would need to be taken to allow for such a program.
- 14. Refer to East Kentucky's and its Member Systems' response to Item 1 in the "Interconnection" requests in the Commission's February 24, 2006 Order where East Kentucky and its Member Systems reference interconnection standards and state their belief that it would take a minimum of 2 years for a committee of electric utility representatives to develop statewide interconnection standards.
- a. Describe the interconnection standards developed and utilized by East Kentucky and its Member Systems.
- b. Do the current interconnection standards differentiate between small generators of 10 MVA and below, and those generators above 10 MVA? Explain the response.
- c. Would it still take a minimum of 2 years to develop only an interconnection standard for small generators of 10 MVA and below? Explain the response.

Kentucky Power is to respond to the following questions:

- 15. Refer to Kentucky Power's response to Item 1, which responds to Item 1 of the "Smart Metering" requests in Appendix C of the Commission's February 24, 2006 Order. Explain why Residential Tariff RS, Storage Water Heating is frozen and only available to currently served customers
- 16. Refer to the March 23, 2006 response A-2 of LG&E and KU to Item 2 of the "Smart Metering" requests, which refers to simple seasonal rates, and to the first bullet under Residential and Small Commercial of the same response. Does Kentucky Power share the same view regarding simple seasonal rates? Explain the response.
- 17. Provide a brief discussion relative to Kentucky Power's DSM programs and explain if and how potential demand response resources are considered in your integrated resource planning process.
- 18. Refer to Kentucky Power's response to Item 2 of the "Interconnection" requests in Appendix C of the Commission's February 24, 2006 Order.
- a. Describe the interconnection process and procedures Kentucky Power references in its response.
- b. Do the current process and procedures differentiate between small generators of 10 MVA and below, and those generators above 10 MVA? Explain the response.
- 19. Refer to Item 3 of the "Interconnection" requests in Appendix C of the Commission's February 24, 2006 Order. Refer also to the March 23, 2006 response of LG&E and KU to the same Commission request, which refers to customers with "open transition" switched generation that operates separately from the distribution grid.

- a. Does Kentucky Power require customers to obtain its authorization to have such "open transition" switched generation arrangements for operational purposes? Explain the response.
- b. How many customers and what amount of such generation do Kentucky Power customers operate and to what extent has Kentucky Power inquired about and/or pursued the potential for having access to this generation at times of peak demand or extreme emergency on its system? Explain the response. If you do not have full knowledge in this area, provide whatever information you have.
- c. Would Kentucky Power see any value in a program encouraging such customers (through the provision of bill credits, for example) to utilize this generation voluntarily to meet their needs and free up utility resources during periods of peak demand or extreme emergency? Explain the response. If yes, describe what actions would need to be taken to allow for such a program.
- 20. The settlement approved by the Commission in Case No. 2005-00341¹ allows Kentucky Power's industrial customers to participate in the PJM Economic Demand Response Program under certain conditions.
 - a. Describe the PJM Economic Demand Response Program.
- b. Assume that Kentucky Power has an industrial customer participating in the program. Describe the potential financial and operational impact to Kentucky Power.

¹ Case No. 2005-00341, General Adjustments of Electric Rates of Kentucky Power Company, final Order dated March 14, 2006.

c. Explain how the PJM Economic Demand Response Program should be considered in this current proceeding.

LG&E and KU are to respond to the following questions:

- 21. Refer to page 2 of 2 of the response to Item 1 in the "Smart Metering" requests in the Commission's February 24, 2006 Order. The first full paragraph on the page refers to the Commission having approved the elimination of seasonal rates for KU in Case No. 2003-00434 and LG&E's beginning to move away from seasonal rates in Case No. 2003-00433.²
- a. These changes were approved as part of the unanimous portions of the settlement agreements reached in these two rate cases. To what extent, if any, do LG&E and KU believe that those agreements establish any precedent or bind the parties, or the Commission, for future cases?
- b. Explain in detail the basis for any decision by LG&E and KU to move away from seasonal rates.
- 22. Refer to page 2 of 2 of the response to Item 2 in the "Smart Metering" requests in the Commission's February 24, 2006 Order. The first paragraph on the page refers to a new DSM program that LG&E is developing that utilizes time-of-day pricing with a real-time component.
- a. Describe the referenced program. If the planning process is in an early stage, provide as much information as is available.

² Case No. 2003-00434, An Adjustment of the Electric Rates, Terms, and Conditions of Kentucky Utilities Company; and Case No. 2003-00433, An Adjustment of the Gas and Electric Rates, Terms, and Conditions of Louisville Gas and Electric Company.

- b. What is the timetable for implementing that program?
- c. Regardless of the responses to 22(a) and (b), explain whether or not it is appropriate for the Commission to consider the referenced program in this proceeding.
- 23. Refer to page 2 of 2 of the response to Item 2 in the "Smart Metering" requests in the Commission's February 24, 2006 Order. The last paragraph on the page refers to the difficulty of implementing DSM programs for large commercial and industrial customers due to the differences between these customers, making standardized solutions unworkable. What barriers, if any, prevent utilities from being involved in developing customer-specific DSM programs for these classes of customers? Explain the response.
- 24. Refer to page 1 of 3 of the response to Item 3 in the "Smart Metering" requests in the Commission's February 24, 2006 Order. The second paragraph in the response states that LG&E and KU believe that customers do not respond to time differentiated rates that are seasonal in nature with meaningful demand response. What is the basis for this belief? Explain the response.
- 25. The March 16, 2006 <u>Courier Journal</u> included an article that briefly described LG&E's offering of 2,000 programmable thermostats. Provide a detailed description of this program.
- 26. Refer to page 2 of 2 of the response to Item 1 in the "Interconnection" requests in the Commission's February 24, 2006 Order. The second full paragraph on

the page refers to customers with significant standby generation being reluctant to utilize this generation other than for their own emergency back-up use. Also refer to the response to Item 2 in the "Interconnection" requests relating to the discussion of customers with "open transition" switched generation.

- a. Relative to each customer generator group identified above, to what extent have LG&E and KU inquired about and/or pursued the potential for having access to this generation at times of peak demand or extreme emergency on their systems? Explain the response.
- b. Would LG&E and KU see any value in a program encouraging either customer generator group (through the provision of bill credits, for example) to utilize this generation voluntarily to meet their needs and free up utility resources during periods of peak demand or extreme emergency? Explain the response. If yes, describe what actions would need to be taken to allow for such a program.
- 27. Refer to LG&E's and KU's response to Item 2 in the "Interconnection" requests in the Commission's February 24, 2006 Order, where LG&E and KU briefly reference their interconnections standards.
- a. Describe the interconnection standards developed and utilized by LG&E and KU.
- b. Do the current interconnection standards differentiate between small generators of 10 MVA and below, and those generators above 10 MVA? Explain the response.

ULH&P is to respond to the following questions:

- 28. Refer to the response to Item 1 of the "Smart Metering" requests in the Commission's February 24, 2006 Order. The last section in the response refers to the residential direct load control air conditioning program, which was approved roughly 2.5 years ago. For each of the three offerings identified, provide the current number of installations and the intended penetration level for the program as a whole.
- 29. Refer to the response to Item 4 of the "Smart Metering" requests in the Commission's February 24, 2006 Order. The last paragraph in the response refers to The Cincinnati Gas and Electric Company's ("CG&E") experience with a residential Time-of-Use ("TOU") rate in Ohio. Provide the CG&E TOU tariff along with a narrative description that highlights the tariff's features.
- 30. Refer to the March 23, 2006 response A-2 of LG&E and KU to Item 2 of the "Smart Metering" requests, which refers to simple seasonal rates, and to the first bullet under Residential and Small Commercial of the same response. Does ULH&P share the same view regarding simple seasonal rates? Explain the response.
- 31. Provide a brief discussion relative to ULH&P's DSM programs and explain if and how potential demand response resources are considered in your integrated resource planning process.
- 32. Refer to the response to Item 3 of the "Interconnection" requests in the Commission's February 24, 2006 Order. Refer also to the response of LG&E and KU to the same Commission request, which refers to customers with "open transition" switched generation that operates separately from the distribution grid.

a. Does ULH&P require customers to obtain its authorization to have

such "open transition" switched generation arrangements for operational purposes?

Explain the response.

b. How many customers and what amount of such generation do

ULH&P customers operate and to what extent has ULH&P inquired about and/or

pursued the potential for having access to this generation at times of peak demand or

extreme emergency on its system? Explain the response. If you do not have full

knowledge in this area, provide whatever information you have.

c. Would ULH&P see any value in a program encouraging these

customers (through the provision of bill credits, for example) to utilize this generation

voluntarily to meet their needs and free up utility resources during periods of peak

demand or extreme emergency? Explain the response. If yes, describe what actions

would need to be taken to allow for such a program.

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DATED <u>April 13, 2006</u>

cc: All Parties

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