

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE 2014 JOINT INTEGRATED RESOURCE PLAN)	CASE NO.
OF LOUISVILLE GAS AND ELECTRIC COMPANY)	2014-00131
AND KENTUCKY UTILITIES COMPANY)	

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION TO
LOUISVILLE GAS AND ELECTRIC COMPANY AND
KENTUCKY UTILITIES COMPANY

Louisville Gas and Electric Company (“LG&E”) and Kentucky Utilities Company (“KU”) (collectively “LG&E/KU” or “the Companies”), pursuant to 807 KAR 5:001, are 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 no later than November 21, 2014. 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.

LG&E/KU shall make timely amendment to any prior response if they obtain 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 LG&E/KU fails or refuses to furnish all or part of the requested information, they shall provide a written explanation of the specific grounds for their 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 the Integrated Resource Plan (“IRP”), page 5-5, footnote 4. The Companies preserve the option to request an extension that will allow Green River 3 and 4 to continue operating. Explain the issues, as they are known, which support keeping the generators operational, or in the contrary, shuttering them.

2. Refer to the IRP, page 5-22, Table 5.(3)-2. Confirm the 2014 Percent Growth in Combined Company Summer Peak Demand after demand-side management (“DSM”) of 8.4 percent is correct, and if so, the reason(s) it is so much greater than other years.

3. Refer to the IRP, page 5-23, where it states, “As the mining industry continues to struggle, KU’s sales in Virginia are forecasted to grow at only 0.1 percent annually from 2014 to 2018.” What is the forecasted growth rate for the mining industry from 2014 through 2028?

4. Refer to the IRP, page 5-28, where it states, “The Public Authority Sector is projected to decline at a rate of 0.5 percent, primarily driven by one large

government related customer.” Explain the circumstances surrounding the decline in usage by the one large government related customer.

5. Refer to the IRP, page 8-2, footnote 2, where it states, “At this time, the Companies have not sought an extension of the compliance date, but are analyzing this option.”

a. What is the latest date on which the Companies can seek an extension of the compliance date?

b. By what date do the Companies intend to make a final decision on whether to seek an extension of the compliance date?

6. Refer to the IRP, page 5-38, where it states, “The two years since the approval of these programs has granted greater insight into program modification opportunities. As a result of the lessons learned, the Companies filed Case No. 2014-00003 with the Commission on January 17, 2014.”

a. Explain in detail what is meant by greater insight into program modification opportunities.

b. Describe in detail the lessons that have been learned over the last two years.

c. Identify and explain all best practices found by the Companies due to the greater insight into program modification opportunities and lessons learned.

7. Refer to the IRP, page 5-48, where it states, “Additionally, the Black and Veatch performed a remaining life assessment on Brown 1 and 2 in 2012.”

a. What was the remaining life of Brown 1 and 2 as determined by the Brown and Veatch remaining life assessment?

b. Provide a copy of the Black and Veatch remaining life assessment for Brown 1 and 2.

8. Refer to the IRP, pages 6-11 and 6-13. The Companies note that 137 customers moved from the commercial to the industrial classification. What drives this migration?

9. Refer to the IRP, page 6-30, which indicates that LG&E and KU use the most recent 20-year average of heating and cooling degree days to represent average weather based on data from the National Oceanic and Atmospheric Administration (“NOAA”).

a. Explain why LG&E and KU selected a 20-year average of degree days rather than an average for a different length of time and include in the response when LG&E and KU began using a 20-year average to represent average weather.

b. Explain whether LG&E and KU have ever relied on a source other than NOAA for weather data and, if so, identify the source.

10. Refer to the IRP, page 6-32, *Changes in Methodology*, which states,

In the 2011 IRP, the company used class-specific load profiles to develop its hourly demand forecasts in an effort to better reflect demand-side management programs that impact the load profile of specific classes. In the 2014 IRP, the company further improved this process by using historical hourly shapes by company, month, and day of week with different weather ranges to better reflect load shapes for different temperature ranges.

Explain whether the Companies used class-specific load profiles, including the industrial sector.

11. Refer to the IRP, pages 6-32 and 6-33, which identify four changes in the methodology incorporated into the 2014 IRP forecasts. Confirm that these are the only changes from the methodology used in the 2011 IRP.

12. Refer to the IRP, page 6-36, where it states, “Prior to this termination, the Companies entered into a new ITO [Independent Transmission Operator] contract with TranServ International, Inc. (“TranServ”) for TranServ to perform the role of the ITO, effective September 1, 2012.”

a. Describe the Companies’ experience with TranServ as its ITO, and identify and explain any issues that have arisen since entering into the new contract.

b. Explain what steps the Companies are taking to procure ITO services once the contract with TranServ expires on August 31, 2015.

13. Refer to the IRP, page 6-38. It is stated that renewable energy resources are not currently economic in Kentucky. Justify this statement as it contrasts with the Companies 10-megawatt (“MW”) solar facility proposed at the Brown station.

14. Refer to the IRP, pages 7-5 and 7-37, which among other things, show each company’s annual energy losses for the past five years as a percentage of energy requirements. Other than in 2011, when it was 5.7 percent, LG&E’s losses percentage was consistently in a range of 4.0 to 4.5 percent over this period, while, other than in 2011, when it was 4.7 percent, KU’s losses percentage was in a range of 5.7 to 6.9 percent annually during this same period. Explain why KU’s percentage regularly exceeds LG&E’s percentage in this manner.

15. Refer to the IRP, page 7-23, the paragraph headed “Primary Municipal.” The last part of the final sentence in the paragraph refers to “transmission” municipal customers. Should this reference be to “primary” municipal customers rather than “transmission” municipal customers?

16. Refer to the IRP, pages 7-32 and 7-33. As stated in the section on Changes in Methodology on pages 6-32 and 6-33, the final paragraph on page 7-32 refers to commercial end-use surveys conducted and used to develop assumptions for small commercial forecasting models. The final paragraph on page 7-33 indicates that LG&E and KU conducted a small commercial end-use survey in early 2011. Explain whether the 2011 survey is the only commercial end-use survey relied upon to develop assumptions for small commercial forecasting models.

17. Refer to the IRP, page 7-50 of the IRP. Confirm that the Louisville Water Company and Fort Knox are the only special contract customers served by either LG&E or KU.

18. Refer to the IRP, page 8-14, where it states, "However, potential efficiency penalties are associated with some of these projects." Identify all known efficiency penalties for such projects, the amount of the efficiency penalty for each project, and how such penalties have been incorporated into the load forecast.

19. Refer to the IRP, page 8-14, regarding transmission, and page 6 of the 2014 IRP Update provided at the September 15, 2014 Informal Conference ("IC") where it states that transmission system considerations were not affected by the change in municipal load. Identify and describe any transmission planning, transmission regulatory matters, or other transmission issues that have arisen since the IC.

20. Refer to the IRP, page 8-23, Table 8.(3)(b) 12(d),(f). State whether the Capital Costs for Brown Solar are net of investment tax credits.

21. Refer to the IRP, page 8-36. The Companies state that through proposed DSM programs, customers will reduce demand by an aggregated 500 MW through

2018. Was this projection based on the recent downturn in projected demand, i.e., the 2014 IRP projections?

22. Refer to the IRP, page 8-37, where it states, "Considering these changes to the Companies' generation portfolio, along with more than 400 MW of demand reduction from DSM programs by 2018 and 131 MW of curtailable load from curtailable service rider customers, the Companies will have a long-term need for capacity beginning in 2025." On page 5-39 and 8-36 of the IRP, the Companies state that 500 MW of demand reduction will be achieved by 2018. Explain the discrepancy in the demand reduction contained in these statements for the amount of DSM/EE to be achieved by 2018.

23. Refer to the IRP, page 8-38. The Companies state that the cost of deploying solar PV (photovoltaic) power has significantly declined and is expected to flatten. When do the Companies expect this flattening to occur?

24. Refer to the IRP, page 8-49 and 8-50, regarding DSM resource screening and assessment. Explain the process and procedures utilized by the Companies to retain the Cadmus Group for the market potential study and DSM Program Review.

25. Refer to the IRP, page 8-64, which states, "The only reason for the Companies to acquire new supply-side or demand-side resources is to reliably meet customers' future energy needs at the lowest reasonable cost." Provide what demand-side resources the Companies acquired as of the 2011 IRP and since the 2011 IRP, and what demand-side resources might be acquired in the future.

26. Refer to the last page of the Technical Appendix – Volume II, KU, LG&E, & ODP Commercial Forecast Models. The last sentence indicates that elasticities of demand were created based on a discussion with Itron and research by LG&E and KU.

a. Provide a general description of how elasticities of demand have been factored into LG&E's and KU's forecasts.

b. Provide the measures of the elasticities of demand reflected in the forecasts for the different customer sectors, both short-term and long-term measures.

27. Refer to the IRP, Volume III, 2014 Reserve Margin Study, Generation and Planning Analysis, Section 2, page 6. The Companies state that on August 4, 2010, they purchased 800 MW of power to meet internal demand.

a. Did the Companies have reserve sharing contracts with neighboring utilities in place at the time?

b. What is the current and proposed future status of the Companies' Reserve Sharing agreements?

28. Refer to the 2014 Resource Assessment Addendum, page 5. The Companies note the need for long-term capacity in 2020. Explain whether the currently withdrawn 700-MW Green River NGCC will remain a viable supply-side source option to fill this capacity need.



Jeff Derouen
Executive Director
Public Service Commission
P.O. Box 615
Frankfort, KY 40602

DATED: NOV 07 2014

cc: Parties of Record

Honorable Kurt J Boehm
Attorney at Law
Boehm, Kurtz & Lowry
36 East Seventh Street
Suite 1510
Cincinnati, OHIO 45202

Rick E Lovekamp
Manager - Regulatory Affairs
LG&E and KU Energy LLC
220 West Main Street
Louisville, KENTUCKY 40202

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

Ed Staton
LG&E and KU Energy LLC
220 West Main Street
Louisville, KENTUCKY 40202

Jody Kyler Cohn
Boehm, Kurtz & Lowry
36 East Seventh Street
Suite 1510
Cincinnati, OHIO 45202

Honorable Allyson K Sturgeon
Senior Corporate Attorney
LG&E and KU Energy LLC
220 West Main Street
Louisville, KENTUCKY 40202

Lawrence W Cook
Assistant Attorney General
Office of the Attorney General Utility & Rate
1024 Capital Center Drive
Suite 200
Frankfort, KENTUCKY 40601-8204

Gregory T Dutton
Assistant Attorney General
Office of the Attorney General Utility & Rate
1024 Capital Center Drive
Suite 200
Frankfort, KENTUCKY 40601-8204

Angela M Goad
Assistant Attorney General
Office of the Attorney General Utility & Rate
1024 Capital Center Drive
Suite 200
Frankfort, KENTUCKY 40601-8204

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