

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

<b>APPLICATION OF KENTUCKY UTILITIES</b>	)	
<b>COMPANY FOR AN ADJUSTMENT OF ITS</b>	)	
<b>ELECTRIC RATES AND FOR</b>	)	<b>CASE NO. 2016-00370</b>
<b>CERTIFICATES OF PUBLIC CONVENIENCE</b>	)	
<b>AND NECESSITY</b>	)	

**In the Matter of:**

<b>APPLICATION OF LOUISVILLE GAS AND</b>	)	
<b>ELECTRIC COMPANY FOR AN</b>	)	
<b>ADJUSTMENT OF ITS ELECTRIC AND</b>	)	<b>CASE NO. 2016-00371</b>
<b>GAS RATES AND FOR CERTIFICATES OF</b>	)	
<b>PUBLIC CONVENIENCE AND NECESSITY</b>	)	

**DATA REQUESTS OF  
KENTUCKY UTILITIES COMPANY AND  
LOUISVILLE GAS AND ELECTRIC COMPANY  
PROPOUNDED TO THE KENTUCKY ATTORNEY GENERAL**

Kentucky Utilities Company (“KU”) and Louisville Gas and Electric Company (“LG&E”) (collectively, “the Companies”) respectfully submit the following data requests to the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention (“AG”), to be answered by the date specified in the procedural schedule established by the Kentucky Public Service Commission (“Commission”) in this matter on December 13, 2016.

**Instructions**

1. As used herein, “Documents” include all correspondence, memoranda, notes, e-mail, maps, drawings, surveys or other written or recorded materials, whether external or internal, of every kind or description in the possession of, or accessible to, the AG, its witnesses, or its counsel.

2. Please identify by name, title, position, and responsibility the person or persons answering each of these data requests.

3. These requests shall be deemed continuing so as to require further and supplemental responses if the AG receives or generates additional information within the scope of these requests between the time of the response and the time of any hearing conducted herein.

4. To the extent that the specific document, work paper, or information as requested does not exist, but a similar document, work paper, or information does exist, provide the similar document, work paper, or information.

5. To the extent that any request may be answered by a computer printout, spreadsheet, or other form of electronic media, please identify each variable contained in the document or file that would not be self-evident to a person not familiar with the document or file.

6. If the AG objects to any request on the ground that the requested information is proprietary in nature, or for any other reason, please notify the undersigned counsel as soon as possible.

7. For any document withheld on the ground of privilege, state the following: date; author; addressee; indicated or blind copies; all persons to whom distributed, shown or explained; and the nature and legal basis for the privilege asserted.

8. In the event any document requested has been destroyed or transferred beyond the control of the AG, its counsel, or its witnesses, state: the identity of the person by whom it was destroyed or transferred and the person authorizing the destruction or transfer; the time, place and method of destruction or transfer; and the reason(s) for its destruction or transfer. If such a document was destroyed or transferred by reason of a document retention policy, describe in detail the document retention policy.

9. If a document responsive to a request is a matter of public record, please produce a copy of the document rather than a reference to the record where the document is located.

## Data Requests

**KU:**

### Mr. Alvarez

1. Refer to the table on page 10 of Mr. Alvarez's testimony. Provide all documentation from the Ameren, ConEd, and Massachusetts Electric proceedings cited supporting the "Benefit Years" shown in the table, as well as citations to the pages in the provided documents where the information supporting the "Benefit Years" claimed by Mr. Alvarez may be found.

### Mr. Holloway

2. Provide a copy of all notes, data, and workpapers prepared by, or on behalf of, Mr. Holloway in connection with this proceeding, including workpapers used to generate any and all tables and exhibits. If any Excel spreadsheets or other computer generated documents were prepared by or on behalf of Mr. Holloway, please provide an electronic version of those documents with all formulas intact.
3. Refer to page 13, lines 14-16 of Mr. Holloway's testimony. Produce all empirical support, objective evidence, studies, or analyses serving as the basis for Mr. Holloway's assertion that levels of transmission maintenance expenditures should be relatively similar from year to year.
4. Produce all analyses or studies Mr. Holloway has performed or participated in developing regarding utility membership or affiliation with Independent Transmission Organizations, Independent System Operators or Regional Transmission Organizations.
5. Refer to page 21, lines 4-6 of Mr. Holloway's testimony regarding Distribution Automation. Please describe and produce all empirical support, objective evidence, studies, or analyses serving as the basis for Mr. Holloway's assertion that the "DSCADA system vendor must be selected, the equipment purchased and installed and troubleshooting must occur before there is any need for the installation of SCADA capable reclosers."

### Mr. Smith

6. Provide a copy of all notes, data, and workpapers prepared by, or on behalf of, Mr. Smith in connection with this proceeding, including workpapers used to generate any and all tables and exhibits. If any Excel spreadsheets or other computer generated documents were prepared by or on behalf of Mr. Smith, please provide an electronic version of those documents with all formulas intact.

Mr. Watkins

7. Provide a copy of all notes, data, and workpapers prepared by, or on behalf of, Mr. Watkins in connection with this proceeding. If any Excel spreadsheets or other computer generated documents were prepared by or on behalf of Mr. Watkins, please provide an electronic version of those documents with all formulas intact.
8. For the table shown on page 39 of Mr. Watkins' testimony, provide the following:
  - a. The source data used to compile the table;
  - b. A detailed description all data used to compile the table;
  - c. The excel workpapers and electronic spreadsheet used to compile the data.
9. For the table shown on page 39 of Mr. Watkins' testimony, provide a detailed description of the methodology used to determine the customers per square mile for each zip code.
10. Provide a detailed description of the methodology used to define the strata definitions for the table shown on page 39 of Mr. Watkins' testimony. Specifically, explain the mathematical or statistical procedure used to develop the ranges used for the for the four strata; for example why Strata 1 included the range of 2 to 8 customers per square mile; why Strata 2 included the range of 8.1 to 14 customers per square mile; why Strata 3 included the range of 14.1 to 33 customers per square mile; and why Strata 4 covered the range of 33.1 to 3,700 customers per square mile.
11. Did Mr. Watkins perform an analysis of lineal miles of conductor for the strata identified in the table shown on page 39 of his testimony? If so, provide the analysis in Excel format.
12. In compiling the table shown on page 39 of Mr. Watkins' testimony, please confirm that the numbers identified under "Count of Zip Codes" do not reflect the results an analysis of lineal miles of conductor for each stratum.
13. Did Mr. Watkins perform an analysis of the number of transformers for the strata identified in the table shown on page 39 of his testimony? If so, provide the analysis in Excel format.
14. In compiling the table shown on page 39 of Mr. Watkins' testimony, please confirm that the numbers identified under "Count of Zip Codes" do not reflect the results an analysis of number of transformers.

15. Did Mr. Watkins perform an analysis of the investment in underground versus overhead distribution plant for the strata identified in the table shown on page 39 of his testimony? If so, provide the analysis in Excel format.
16. In compiling the table shown on page 39 of Mr. Watkins' testimony, please confirm that the numbers identified under "Count of Zip Codes" do not reflect the results an analysis of overhead versus underground plant for each stratum.
17. Confirm that Mr. Watkins performed no analysis of the cost differences between serving customers in urban areas and serving customers in rural areas.
18. Confirm that Mr. Watkins performed no analysis of cost differences between areas or zip codes of the Company's service area with high customer density and areas or zip codes with low customer density.
19. Please indicate whether Mr. Watkins performed an analysis to determine whether more than one electric utility provided service to customers in the zip codes used in his analysis. Specifically, did Mr. Watkins consider the number of customers in each zip code that are served by an electric cooperative, Duke Energy – Kentucky, Kentucky Power Company or TVA?
20. On Page 55, lines 6-7, Mr. Watkins states, "Regarding electricity usage, i.e., the level of kWh consumption is the best and most direct indicator of benefits received." Please explain in detail how kWh is a better indicator of benefits received than kW or some combination of kW and kWh.
21. On Page 56, line 5-15, Mr. Watkins discusses volumetric based pricing and how he is unaware of any customers who purchase competitively-based transmission and generation services who pay a fixed charge. Please explain if any transmission and generation costs are considered customer-related costs in a cost of service study? If not, please explain how Mr. Watkins's discussion on page 56, lines 5-15, is pertinent to the recovery of customer-related distribution costs through a customer charge. Also, please provide instances where a utility's distribution services are priced on competitive basis.
22. On Page 60, lines 6 – 26, Mr. Watkins discusses small volume customers. Please provide all data and analysis that supports Mr. Watkins' contention that small volume customers on KU's system use power more consistently and are "non-heating and air conditioning customers."

Dr. Woolridge

23. Does the adjustment factor used in Panel D of Exhibit JRW 5.1 result in an increase in short-term debt as a percentage of total debt? Does this overstate the amount of the adjustment?
24. Please provide copies of all electronic files used in the preparation of Dr. Woolridge's testimony exhibits with all data and formulas intact.

25. Please provide copies of all articles, publications, and other sources documents referenced in Dr. Woolridge's testimony and exhibits.
26. Please provide a copy of the AUS Utilities Report relied on by Dr. Woolridge to prepare his testimony and referenced at page 25, lines 14-15. Please provide the most recent edition of this report in Dr. Woolridge's possession.
27. Reference page 43, lines 24-25. Please provide copies of all publications from investment firms that documents Dr. Woolridge's position that the three-stage DCF is a "common application for investment firms."

**LG&E:**

Mr. Alvarez

1. Refer to the table on page 10 of Mr. Alvarez's testimony. Provide all documentation from the Ameren, ConEd, and Massachusetts Electric proceedings cited supporting the "Benefit Years" shown in the table, as well as citations to the pages in the provided documents where the information supporting the "Benefit Years" claimed by Mr. Alvarez may be found.

Mr. Holloway

2. Provide a copy of all notes, data, and workpapers prepared by, or on behalf of, Mr. Holloway in connection with this proceeding, including workpapers used to generate any and all tables and exhibits. If any Excel spreadsheets or other computer generated documents were prepared by or on behalf of Mr. Holloway, please provide an electronic version of those documents with all formulas intact.
3. Refer to page 13, lines 14-16 of Mr. Holloway's testimony. Produce all empirical support, objective evidence, studies, or analyses serving as the basis for Mr. Holloway's assertion that levels of transmission maintenance expenditures should be relatively similar from year to year.
4. Produce all analyses or studies Mr. Holloway has performed or participated in developing regarding utility membership or affiliation with Independent Transmission Organizations, Independent System Operators or Regional Transmission Organizations.
5. Refer to page 21, lines 4-6 of Mr. Holloway's testimony regarding Distribution Automation. Please describe and produce all empirical support, objective evidence, studies, or analyses serving as the basis for Mr. Holloway's assertion that the "DSCADA system vendor must be selected, the equipment purchased and installed and troubleshooting must occur before there is any need for the installation of SCADA capable reclosers."

Mr. Smith

6. Provide a copy of all notes, data, and workpapers prepared by, or on behalf of, Mr. Smith in connection with this proceeding, including workpapers used to generate any and all tables and exhibits. If any Excel spreadsheets or other computer generated documents were prepared by or on behalf of Mr. Smith, please provide an electronic version of those documents with all formulas intact.

Mr. Watkins

7. Provide a copy of all notes, data, and workpapers prepared by, or on behalf of, Mr. Watkins in connection with this proceeding. If any Excel spreadsheets or other computer generated documents were prepared by or on behalf of Mr. Watkins, please provide an electronic version of those documents with all formulas intact.
8. For the table shown on page 38 of Mr. Watkins' testimony, provide the following:
  - a. The source data used to compile the table;
  - b. A detailed description all data used to compile the table;
  - c. The excel workpapers and electronic spreadsheet used to compile the data.
9. For the table shown on page 38 of Mr. Watkins' testimony, provide a detailed description of the methodology used to determine the customers per square mile for each zip code.
10. Provide a detailed description of the methodology used to define the strata definitions for the table shown on page 38 of Mr. Watkins' testimony. Specifically, explain the mathematical or statistical procedure used to develop the ranges used for the for the three strata; for example why Strata 1 included the range of 18 to 435 customers per square mile; why Strata 2 included the range of 435.1 to 1,458 customers per square mile; and why Strata 3 included the range of 1,458 to 3,297 customers per square mile.
11. Did Mr. Watkins perform an analysis of lineal miles of conductor for the strata identified in the table shown on page 38 of his testimony? If so, provide the analysis in Excel format.
12. In compiling the table shown on page 38 of Mr. Watkins' testimony, please confirm that the numbers identified under "Count of Zip Codes" do not reflect the results an analysis of lineal miles of conductor for each stratum.
13. Did Mr. Watkins perform an analysis of the number of transformers for the strata identified in the table shown on page 38 of his testimony? If so, provide the analysis in Excel format.



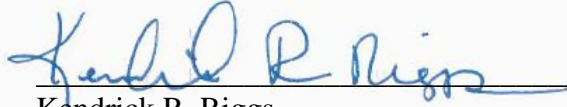
14. In compiling the table shown on page 38 of Mr. Watkins' testimony, please confirm that the numbers identified under "Count of Zip Codes" do not reflect the results an analysis of number of transformers.
15. Did Mr. Watkins perform an analysis of the investment in underground versus overhead distribution plant for the strata identified in the table shown on page 38 of his testimony? If so, provide the analysis in Excel format.
16. In compiling the table shown on page 38 of Mr. Watkins' testimony, please confirm that the numbers identified under "Count of Zip Codes" do not reflect the results an analysis of overhead versus underground plant for each stratum.
17. Confirm that Mr. Watkins performed no analysis of the cost differences between serving customers in urban areas and serving customers in rural areas.
18. Confirm that Mr. Watkins performed no analysis of cost differences between areas or zip codes of the Company's service area with high customer density and areas or zip codes with low customer density.
19. Please indicate whether Mr. Watkins performed an analysis to determine whether more than one electric utility provided service to customers in the zip codes used in his analysis. Specifically, did Mr. Watkins consider the number of customers in each zip code that are served by an electric cooperative, Duke Energy – Kentucky, Kentucky Power Company or TVA?
20. On Page 54, lines 9-10, Mr. Watkins states, "Regarding electricity usage, i.e., the level of kWh consumption is the best and most direct indicator of benefits received." Please explain in detail how kWh is a better indicator of benefits received than kW or some combination of kW and kWh.
21. On Page 55, lines 12-19, Mr. Watkins discusses volumetric based pricing and how he is unaware of any customers who purchase competitively-based transmission and generation services who pay a fixed charge. Please explain if any transmission and generation costs are considered customer-related costs in a cost of service study? If not, please explain how Mr. Watkins's discussion on page 55, lines 12-19, is pertinent to the recovery of customer-related distribution costs through a customer charge. Also, please provide instances where a utility's distribution services are priced on competitive basis.
22. On Page 59, lines 6 – 26, Mr. Watkins discusses small volume customers. Please provide all data and analysis that supports Mr. Watkins' contention that small volume customers on LG&E's system use power more consistently and are "non-heating and air conditioning customers."

Dr. Woolridge

23. Does the adjustment factor used in Panel D of Exhibit JRW 5.1 result in an increase in short-term debt as a percentage of total debt? Does this overstate the amount of the adjustment?
24. Please provide copies of all electronic files used in the preparation of Dr. Woolridge's testimony exhibits with all data and formulas intact.
25. Please provide copies of all articles, publications, and other sources documents referenced in Dr. Woolridge's testimony and exhibits.
26. Please provide a copy of the AUS Utilities Report relied on by Dr. Woolridge to prepare his testimony and referenced at page 25, lines 14-15. Please provide the most recent edition of this report in Dr. Woolridge's possession.
27. Reference page 43, lines 24-25. Please provide copies of all publications from investment firms that documents Dr. Woolridge's position that the three-stage DCF is a "common application for investment firms."

Dated: March 17, 2017

Respectfully submitted,

A handwritten signature in blue ink, reading "Kendrick R. Riggs", is written over a horizontal line.


Kendrick R. Riggs  
Stoll Keenon Ogden PLLC  
2000 PNC Plaza  
500 West Jefferson Street  
Louisville, Kentucky 40202-2828  
Telephone: (502) 333-6000  
Fax: (502) 627-8722  
[kendrick.riggs@skofirm.com](mailto:kendrick.riggs@skofirm.com)

Allyson K. Sturgeon  
Senior Corporate Attorney  
LG&E and KU Services Company  
220 West Main Street  
Louisville, Kentucky 40202  
Telephone: (502) 627-2088  
Fax: (502) 627-3367  
[allyson.sturgeon@lge-ku.com](mailto:allyson.sturgeon@lge-ku.com)

*Counsel for Kentucky Utilities Company  
and Louisville Gas and Electric Company*

**CERTIFICATE OF COMPLIANCE**

This is to certify that Kentucky Utilities Company's and Louisville Gas and Electric Company's March 17, 2017 electronic filing of the Data Requests is a true and accurate copy of the same document being filed in paper medium; that the electronic filing has been transmitted to the Commission on March 17, 2017; that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding; and that an original and six copies, in paper medium of the Data Requests, are being mailed by U.S. First Class Mail, postage prepaid, to the Commission on March 17, 2017.

  
\_\_\_\_\_  
*Counsel for Kentucky Utilities Company  
and Louisville Gas and Electric Company*