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PUBLIC SERVICE COMMISSION

Mr. Jeff DeRouen
Executive Director
Kentucky Public Service Commission
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February 10, 2012

Re: An Investigation of the Reliability Measures of Kentucky's Jurisdictional Electric Distribution Utilities; Case No. 2011-00450

Dear Mr. DeRouen:

Enclosed please find and accept for filing the original and ten (10) copies of Louisville Gas and Electric Company and Kentucky Utility Company's Joint Response to the Information Requested in the Appendix of Commission's Order dated January 11, 2012 in the above referenced docket.

Should you have any questions please contact me at your convenience.

Sincerely,

Rick E. Lovekamp

cc: Parties of Record

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN INVESTIGATION OF THE RELIABILITY MEASURES OF KENTUCKY'S JURISDICTIONAL ELECTRIC DISTRIBUTION UTILITIES	)))	CASE NO. 2011-00450

RESPONSE OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITY COMPANY'S TO APPENDIX OF THE COMMISSION'S ORDER DATED JANUARY 11, 2012

FILED: FEBRUARY 10, 2012

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) **SS:**
COUNTY OF JEFFERSON)

The undersigned, **Paul Gregory "Greg" Thomas**, being duly sworn, deposes and says that he is Vice President, Energy Delivery – Distribution Operations for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the foregoing testimony, and that the answers contained therein are true and correct to the best of his information, knowledge and belief.

Paul Gregory "Greg" Thomas

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 8th day of February 2012.

(SEAL)
Notary Public

My Commission Expires:

SHERI L. GARDNER
Notary Public, State at Large, KY
My commission expires Dec. 24, 2013

LOUISVILLE GAS AND ELECTRIC COMPANY
and
KENTUCKY UTILITIES COMPANY

CASE NO. 2011-00450

Response to Appendix of the Commission's Order
Dated January 11, 2012

Question No. 1

Witness: Paul Gregory "Greg" Thomas

Q-1. The following questions relate to the data maintained by each utility.

a. Identify the number of circuits currently maintained by the electric utility.

b. Does the utility calculate separate SAIDI, SAIFI and CAIDI indices for each circuit? If no, explain why not and explain the degree to which the utility tracks the following:

(1) SAIDI;

(2) SAIFI; and

(3) CAIDI.

c. Identify any other reliability indicator or measure the utility uses to assess reliability. Explain the significance of each indicator or measure used. Does the utility maintain these indicators or measures for each circuit?

A-1. a. The Companies maintain the following number of circuits:

LG&E	619
KU Ky.	1,106
Total	1,725

b. Yes, the Companies calculate separate SAIDI, SAIFI and CAIDI indices for all circuits.

c. SAIDI and SAIFI are the metrics used by the utilities to measure reliability performance and drive improvement. In addition to SAIDI and SAIFI circuit performance, CEMI (Customers Experiencing Multiple Interruptions) is another measure used by the utilities to identify areas for improvement. This measure is also available for each circuit.

LOUISVILLE GAS AND ELECTRIC COMPANY
and
KENTUCKY UTILITIES COMPANY

CASE NO. 2011-00450

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Dated January 11, 2012

Question No. 2

Witness: Paul Gregory "Greg" Thomas

Q-2. The following questions refer to the manner in which each utility calculates and tracks the SAIDI, SAIFI and CAIDI indices.

a. Identify the manner in which the indices are calculated and tracked; i.e., manually (Excel spread sheet), or an electronic or mechanized (outage reporting) system.

b. If the response to Item 2.a. above is electronic or mechanized, provide a description of the system and explain whether it was developed internally or purchased from a third-party vendor. If purchased from a third-party vendor, provide the name of the vendor and an estimate of the original cost of the system.

c. If the response in Item 2.a. above is manually, provide a description of the elements tracked. Discuss in detail any inquiry made into the internal development of an electronic or mechanized system or any consideration of the purchase of a system from a third-party vendor.

A-2. a. The Companies utilize an electronic Outage Management System (OMS) to manage restoration and track outage data. The data is extracted from OMS and entered into an Excel spreadsheet to calculate the indices.

b. The OMS captures data needed to calculate the SAIDI, SAIFI and CAIDI indices. It is a third party vendor product offered by Oracle Utilities called Network Management System. This system was put into production in 2004 at a cost of approximately $6.88 million. The OMS was upgraded to version 1.8 in 2008 for approximately $500,000.

c. N/A

LOUISVILLE GAS AND ELECTRIC COMPANY
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CASE NO. 2011-00450

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Question No. 3

Witness: Paul Gregory "Greg" Thomas

Q-3. Concerning SAIDI, SAIFI and CAIDI reporting: the Commission directed that the reporting be based on the criteria and definitions set forth in the IEEE Standard.

a. If the utility does not follow the IEEE standard, explain why not. Explain what standard(s) the utility does follow in its calculation of SAIDI, SAIFI and CAIDI.

b. Does the utility track and review SAIDI, SAIFI and CAIDI monthly, quarterly or annually?

c. Are SAIDI, SAIFI and CAIDI tracked on a rolling 12-month period or for a more discrete period of time; i.e., monthly, quarterly, or annually?

d. Currently, in each annual report submitted pursuant to the Final Order in Case No. 2006-00494, each utility provides system-wide SAIDI, SAIFI and CAIDI calculated for a calendar year. Identify any other preferred 12-month reporting parameter; i.e., calendar year, fiscal year, or some other 12-month method.

e. Does the utility review SAIDI, SAIFI, and CAIDI by any discrete fashion such as by division, district, region or some other method?

A-3. a. The Companies follow the IEEE 1366 – 2003 standard.

b. SAIDI, SAIFI, and CAIDI are tracked monthly and annually.

c. SAIDI, SAIFI, and CAIDI are tracked monthly and annually on a calendar year basis.

d. The Companies prefer system-wide SAIDI, SAIFI, and CAIDI calculated on a calendar year.

e. The Companies review SAIDI, SAIFI, and CAIDI by Operation Center area.

LOUISVILLE GAS AND ELECTRIC COMPANY
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KENTUCKY UTILITIES COMPANY

CASE NO. 2011-00450

Response to Appendix of the Commission's Order
Dated January 11, 2012

Question No. 4

Witness: Paul Gregory "Greg" Thomas

Q-4. The following questions relate to the requirement that each utility report the ten worst-performing circuits for each index in the annual report submitted pursuant to the Final Order in Case No. 2006-00494.

a. If the utility does not track SAIDI, SAIFI and CAIDI for each circuit, explain how the ten worst-performing circuits are identified.

b. Does the utility see benefit in expanding the reporting of the worst-performing circuits to the 15 or 20 worst-performing circuits for each index?

c. Identify any alternative to reporting the ten worst-performing circuits that the utility utilizes to determine system reliability.

A-4. a. The Companies track SAIDI, SAIFI and CAIDI for each circuit.

b. The Companies do not see benefit in expanding the current reporting of the worst performing circuits (WPCs) to the 15 or 20 worst-performing circuits for each index. The top ten annual WPCs do not reflect the average performance of the circuits over time. The information can be skewed by a single or unique event that may be non-controllable (fire, vehicle, public interference, dig-ins) by the utility.

c. The Commission may want to consider a top ten WPC list based on the average of a three to five year history and exclude non-controllable events. The Companies' reliability improvement programs are based on a five year average. The five year average tends to normalize weather and tree trimming cycles over time.

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Question No. 5

Witness: Paul Gregory "Greg" Thomas

Q-5. The following questions relate to the identification of the ten worst-performing circuits for each index.

a. Provide an explanation of the actions taken by the utility once the ten worst-performing circuits for each index have been identified. Include the typical steps taken to correct the reliability issues relating to the ten worst-performing circuits for each index.

b. Provide a timeline of the typical steps taken to correct reliability issues relating to the ten worst-performing circuits for each index.

A-5. a. The top ten worst-performing circuits (WPCs) of the previous year are identified in January of the following year and reported to the Commission in April. Once identified, engineers evaluate the top ten WPCs and determine the root cause(s). A corrective action plan is then developed as appropriate. Work requests are generated to make corrections, and crews are assigned the work. Upon completion of the work, WPCs are monitored for effectiveness of the reliability improvement.

b. The steps described in A-5.a. above are typically completed within the current year.