

VERIFICATION

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

The undersigned, **Delbert Billiter**, being duly sworn, deposes and says that he is Manager — Fuels Risk Management for LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.


Delbert Billiter

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 25th day of February 2019.

 (SEAL)


Notary Public

My Commission Expires:
Judy Schooler
Notary Public, ID No. 603967
~~—State at Large, Kentucky~~
Commission Expires 7/11/2022

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Michael P. Drake**, being duly sworn, deposes and says that he is Director, Generation Services for LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.



Michael P. Drake

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 12th day of February 2019.

 (SEAL)

Notary Public

My Commission Expires:

Judy Schooler
Notary Public, ID No. 603967
State at Large, Kentucky
Commission Expires 7/11/2022

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Charles R. Schram**, being duly sworn, deposes and says that he is Director — Power Supply, for LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.


Charles R. Schram

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 25th day of February 2019.

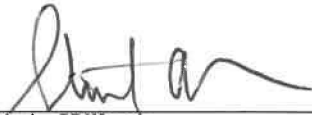

Judy Schooler (SEAL)
Notary Public

My Commission Expires:
Judy Schooler
Notary Public, ID No. 603967
~~State at Large, Kentucky~~
Commission Expires 7/11/2022

VERIFICATION

COMMONWEALTH OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

The undersigned, **Stuart A. Wilson**, being duly sworn, deposes and says that he is Director — Energy Planning, Analysis and Forecast for LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.



Stuart A. Wilson

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 25th day of February 2019.



Judy Schooler (SEAL)
Notary Public

My Commission Expires:
Judy Schooler
Notary Public, ID No. 603967
~~State at Large, Kentucky~~
Commission Expires 7/11/2022

LOUISVILLE GAS AND ELCTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 1

Responding Witness: Delbert Billiter

Q-1. For the period from May 1, 2018, to October 31, 2018 (the last six months of the period under review), provide the amount of coal purchased in tons, and the percentage of purchases that were spot versus contract.

A-1. During the review period LG&E purchased 3,555,930 tons.

Spot: 9% (306,125 tons)

Contract: 91% (3,249,805 tons)

LOUISVILLE GAS AND ELCTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 2

Responding Witness: Delbert Billiter

- Q-2. For the last six months of the period under review, list each coal purchase made under a long-term contract (one year or greater). For each purchase, list:
- a. Contract or purchase order number;
 - b. The supplier's name;
 - c. The location(s) of production facilities from which the coal is sourced;
 - d. The method of delivery, (i.e., barge, truck, rail, other);
 - e. The actual quantity received during the review period; and
 - f. Current price paid per ton.
- A-2. See attached. Page 1 of the attachment shows only the actual quantity received by LG&E under each contract and page 2 shows the actual combined quantity received by LG&E and KU under each contact.

LG&E Coal Purchases (unloaded) under long-term contract						
May 1, 2018 thru October 31, 2018						
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Contract/PO	Supplier	Production Facility	Delivery Method	Actual Quantity Received	Tonnage Requirement*	Current Price**
J17002	Alliance Coal LLC	W-KY	Barge	584,684	1,000,000	\$42.50
J17005	Alliance Coal LLC	W-KY	Rail	381,181	500,000	\$38.50
J18003	Alliance Coal LLC	W-KY	Barge	242,357	500,000	\$38.00
J18009	Alliance Coal LLC	W-KY	Barge	489,797	575,000	\$36.00
J16012	Arch Coal Sales Company Inc.	WY	Barge	-	-	\$12.60
J18008	Arch Coal Sales Company Inc.	WY	Barge	-	337,500	\$12.00
J17001	Contura Energy	PA	Barge	-	-	\$38.00
J16005	Eagle River Coal LLC	IL	Barge	96,874	210,000	\$51.79
J16018	Foresight Coal Sales LLC	IL	Barge	478,319	750,000	\$42.35-IL, \$41.45-W-KY
J18005	Knight Hawk Coal, LLC	IL	Barge	70,774	250,000	\$35.05
J16007	Peabody COALSALLES LLC	IN	Barge, Rail	65,487	375,000	\$45.53-B, \$45.36-B, \$42.31-R
J14001	Rhino Energy LLC	W-KY	Barge	96,142	200,000	\$37.00
J16006	The American Coal Company	IL, WV, W-KY	Barge	10,241	325,000	\$39.60-IL, \$38.60-WV, \$38.70-W-KY
J17004	The American Coal Company	IL, WV, W-KY	Barge	119,328	416,667	\$34.20-IL, \$33.20-WV, \$33.30-W-KY
J18004	Western Ky Minerals, Inc	W-KY	Barge	57,278	78,375	\$38.00
J14010C	Western Ky Consolidated Resources, LLC	W-KY	Rail, Barge	53,349	49,724	\$42.00
J16017B	Western Ky Consolidated Resources, LLC	W-KY	Rail, Barge	133,601	168,869	\$39.50
J18002B	Western Ky Consolidated Resources, LLC	W-KY	Rail, Barge	370,393	617,761	\$41.78
				3,249,805		
*Tonnage Requirement is a ratable volume for combined LG&E and KU coal station shipments						
**Prices vary by source/transportation type. Prices as of 10.1.18						
Attachment to Response to Question No. 2						BILLITER
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Combined LG&E and KU Coal Purchases (unloaded) under long-term contract						
May 1, 2018 thru October 31, 2018						
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Contract/PO	Supplier	Location of Production Facility	Delivery Method	Actual Quantity Received	Tonnage Requirement*	Current Price** (\$/ton)
J17002	Alliance Coal LLC	W-KY	Barge	957,378	1,000,000	\$42.50
J17005	Alliance Coal LLC	W-KY	Rail	381,181	500,000	\$38.50
J18003	Alliance Coal LLC	W-KY	Barge	482,798	500,000	\$38.00
J18009	Alliance Coal LLC	W-KY	Barge	557,856	575,000	\$36.00
J16012	Arch Coal Sales Company Inc.	WV	Barge	15,072	-	\$12.60
J18008	Arch Coal Sales Company Inc.	WV	Barge	261,779	337,500	\$12.00
J17001	Contura Energy	PA	Barge	30,448	-	\$38.00
J16005	Eagle River Coal LLC	IL	Barge	212,585	210,000	\$51.79
J16018	Foresight Coal Sales LLC	IL	Barge	740,790	750,000	\$42.35-IL, \$41.45-W-KY
J18005	Knight Hawk Coal, LLC	IL	Barge	236,757	250,000	\$35.05
J16007	Peabody COALSALLES LLC	IN	Barge, Rail	359,503	375,000	\$45.53-B, \$45.36-B, \$42.31-R
J14001	Rhino Energy LLC	W-KY	Barge	182,752	200,000	\$37.00
J16006	The American Coal Company	IL, WV, W-KY	Barge	434,699	325,000	\$39.60-IL, \$38.60-WV, \$38.70-W-KY
J17004	The American Coal Company	IL, WV, W-KY	Barge	500,706	416,667	\$34.20-IL, \$33.20-WV, \$33.30-W-KY
J18004	Western Ky Minerals, Inc	W-KY	Barge	98,918	78,375	\$38.00
J14010C	Western Ky Consolidated Resources, LLC	W-KY	Rail, Barge	64,681	49,724	\$42.00
J16017B	Western Ky Consolidated Resources, LLC	W-KY	Rail, Barge	138,413	168,869	\$39.50
J18002B	Western Ky Consolidated Resources, LLC	W-KY	Rail, Barge	525,381	617,761	\$41.78
				6,181,695	6,353,896	
*Tonnage Requirement is a ratable volume for combined LG&E and KU coal station shipments						
**Prices vary by source/transportation type. Prices as of 10.1.18						
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LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 3

Responding Witness: Delbert Billiter

Q-3.

- a. As of the last day of the review period, state the coal inventory level in tons, and in number of days' supply. Provide this information by generating station and in the aggregate.
- b. Describe the criteria used to determine the number of days' supply.
- c. State the target coal inventory level for each generating station, and for the total system.
- d. If actual coal inventory exceeds the target inventory by ten days' supply, state the reasons for the excessive inventory.
- e. (1) State whether any significant changes in the current coal inventory target are expected within the next 12 months.

(2) If so, state the expected change, and the reasons for this change.

A-3. a. As of October 31, 2018:

Mill Creek	583,794 Tons; 40 Days	Target 20-41 Days
Trimble County ^{1,2}	177,878 Tons; 32 Days	Target 21-43 Days
Total	761,672 Tons; 36 Days	Target 19-39 Days

¹Inventory listed for Trimble County does not include the 32,400 tons sold to the Refined Coal facility operator that remains in the onsite coal pile, as previously discussed in Case No. 2015-00264.

²Trimble County coal inventory tons is LG&E's allocated ownership of both high sulfur coal, which is used in Unit 1 and Unit 2, and PRB coal, which is used only in Unit 2. The days in inventory and target range are calculated on a combined basis regardless of ownership.

- b. The method of calculating days in inventory is based on each plant's coal burn capability (coal tons in inventory divided by 90% of each generating unit's heat input description from its air permit to operate).

Upper and lower days of inventory targets were established for each plant taking into consideration the plant's operating parameters. Each plant's "least cost" inventory range is established annually during the planning process taking into account the risk of coal delivery disruptions, potential coal burn volatility, procurement reaction time for short term coal supply, cost of unserved energy, and current coal and electricity prices.

- c. See (a) above.
- d. Not applicable.
- e. (1) LG&E does not expect significant changes to its current coal inventory target levels; however, during the Companies' planning cycle minor adjustments may be made to the inventory targets if warranted.

(2) Not applicable.

LOUISVILLE GAS AND ELCTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 4

Responding Witness: Delbert Billiter

Q-4. List each written coal-supply solicitation issued during the last six months of the period under review.

- a. For each solicitation, provide the date of the solicitation, the type of solicitation (contract or spot), the quantities solicited, a general description of the quality of coal solicited, the time period over which deliveries were requested, and the generating unit(s) for which the coal was intended.
- b. For each solicitation, state the number of vendors to whom the solicitation was sent, the number of vendors who responded, and the selected vendor(s). Provide the bid tabulation sheet or corresponding document that ranks the proposals. (This document shall identify all vendors who made offers.) State the reasons for each selection. For each lowest-cost bid not selected, explain why the bid was not selected.

A-4. a. **SOLICITATION 1**

Date: August 17, 2018
Contract/Spot: Spot
Quantities: up to 100,000 tons per month
Quality: Suitable for KU's Ghent and E.W. Brown Stations, LG&E's Mill Creek Station, and KU's and LG&E's Trimble County Station
Period: October 1, 2018 through December 31, 2018 – Spot
Generating Units: all units at Ghent, E.W. Brown, Trimble County and Mill Creek Stations

- b. Number of vendors sent a solicitation: 112
Number of vendors responded: 3 companies / 3 offers
Selected vendor(s): The vendor selected were based upon the lowest evaluated delivered cost, operational and environmental requirements of the units and other factors impacting coal supply reliability as noted on the bid evaluation sheets attached.

High Sulfur – Spot
Consolidation Coal Company – J18030

The bid analysis information is confidential and proprietary and is being provided under seal pursuant to a petition for confidential protection.

The entire attachment is
Confidential and
provided separately
under seal.

LOUISVILLE GAS AND ELCTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 5

Responding Witness: Delbert Billiter

- Q-5. List each oral coal-supply solicitation issued during the last six months of the period under review.
- a. For each solicitation, state why the solicitation was not written, the date(s) of the solicitation, the quantities solicited, a general description of the quality of coal solicited, the time period over which deliveries were requested, and the generating unit(s) for which the coal was intended.
 - b. For each solicitation, identify all vendors solicited and the vendor(s) selected. Provide the bid tabulation sheet or other document that ranks the proposals. (This document shall identify all vendors who made offers.) State the reasons for each selection. For each lowest-cost bid not selected, explain why the bid was not selected.
- A-5. There were no oral coal-supply solicitations during the period under review.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 6

Responding Witness: Charles R. Schram

- Q-6. For the last six months of the period under review, list each vendor from whom natural gas was purchased for generation and the quantities and the nature of each purchase (i.e., spot or contract). Provide the percentage of purchases that were spot versus contract.
- A-6. See attached for the list of vendors, associated quantities, and the nature of each natural gas purchase. During the last six months of the period under review, 66 percent of purchases were made on a spot basis and 33 percent purchased forward. Forward purchases of natural gas are for the Cane Run 7 combined cycle unit.

Attachment to Response to Question No. 6
Page 1 of 1
Schram

<u>Vendor</u>	<u>Type</u> ¹	<u>MMBtu</u>
BP Energy Company	Spot	1,018,569
CenterPoint Energy Service, Inc.	Spot	119,700
Cima Energy , LP	Spot	581,473
Colonial Energy, Inc.	Spot	96,608
ConocoPhillips Company	Spot	101,100
Direct Energy Business Marketing, LLC	Spot	72,700
DTE Energy Trading, Inc.	Spot	10,000
Eco-Energy, LLC	Spot	136,500
EDF Trading North America, LLC	Spot	14,300
Exelon Generation Company, LLC	Spot	763,754
J. Aron & Company LLC	Spot	55,200
Macquarie Energy, LLC	Spot	162,311
Mercuria Energy America, Inc.	Spot	45,000
NextEra Energy Marketing, LLC	Spot	2,152,971
NJR Energy Services Company	Spot	81,000
Range Resources - Appalachia, LLC	Spot	190,300
Sequent Energy Management, L.P.	Spot	238,800
Shell Energy North America (US), L.P.	Spot	1,834,425
Spire Marketing Inc.	Spot	492,105
SWN Energy Services Company, LLC	Spot	188,000
Tenaska Marketing Ventures	Spot	6,351,068
Texla Energy Management, Inc.	Spot	188,800
TrailStone NA Logistics, LLC	Spot	120,000
Tennessee Valley Authority	Spot	83,000
Twin Eagle Resource Management, LLC	Spot	137,900
Uniper Global Commodities North America LLC	Spot	654,472
United Energy Trading, LLC	Spot	8,399
Wells Fargo Commodities, LLC	Spot	30,000
Columbia Gas of Kentucky, Inc.	GSO Customer ²	213
LGE-GAS SUPPLY	Special Contract ³	179,948
DTE Energy Trading, Inc.	Forward	1,850,000
J. Aron & Company LLC	Forward	1,528,867
Tenaska Marketing Ventures	Forward	1,540,000
Uniper Global Commodities North America LLC	Forward	3,050,000
	Total Volume	24,077,483

¹ Spot refers to gas purchases delivered during the next gas day following the transaction. Friday transactions include Sat, Sun, & Mon (holiday weekends can cover four days). Forward refers to gas purchased for delivery periods typically starting after the current month.

² KU is a General Sales Other (GSO) customer of Columbia Gas of Kentucky for the Haefling Plant; no volume purchase commitments.

³ LG&E is the local gas distribution company; no volume purchase commitments.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 7

Responding Witness: Charles R. Schram

- Q-7. For the last six months of the period under review, state if there were any instances in which a natural gas generating unit could not be operated when it otherwise would have run, due to pipeline constraints or natural gas being unavailable.
- A-7. There were no instances of generating unit restrictions due to pipeline constraints or natural gas unavailability.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 8

Responding Witness: Delbert Billiter / Charles R. Schram

- Q-8. State if there have been any changes to hedging activities for coal or natural gas purchases used for generation since the previous FAC review proceeding. If so, describe the changes in detail.
- A-8. LG&E does not engage in financial hedging activities for its coal or natural gas purchases.

There have been no changes to the physical hedging practices and only a small modification, for year 1 only, to the guidelines since the previous review proceeding. LG&E uses the following guidelines in utilization of coal under contract for the minimum projected requirement:

1 year out	98 – 102% (previously 95 – 100%)
2 years out	80 – 90%
3 years out	40 – 90%
4 years out	30 – 70%
5 years out	10 – 50%
6 years out	0 – 30%

The natural gas fuel procurement guidelines have been updated by marginally increasing the amount of gas targeted for purchase during the subsequent three year period. The current year (prior to the three years addressed in the guidelines) was also redefined to include January and February of the next calendar year, recognizing the seasonal considerations to purchasing natural gas for the winter months. For the current year, the Company's practice continues to target purchasing no more than 50 percent of the forecasted burn at CR7 for the year. Guidelines for forward purchases in Years 1-3 (Year 1 is defined as current year plus one year) are based on a percentage of the minimum forecasted CR7 natural gas requirement. The minimum forecasted requirement is established during the

annual business planning process and is calculated based on the minimum generation required from CR7 to meet the projected annual system electric demand. The guidelines for the amount of gas the Company will procure for Years 1-3 are listed below.

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>
Prior guideline	10-50%	0-30%	0-10%
Updated guideline	40-60%	20-40%	0-20%

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 9

Responding Witness: Delbert Billiter / Charles R. Schram

Q-9.

- a. State whether LG&E has audited any of its fuel or transportation contracts during the last six months of the period under review.
- b. If so, for each audited contract:
 - (1) Identify the contract;
 - (2) Identify the auditor; and
 - (3) State the results of the audit and describe the actions that LG&E took as a result of the audit.

A-9.

- a. No. LG&E has not conducted any financial audits of its fuel or transportation contracts.

LG&E's Manager Fuels Technical Services or LG&E's Mining Engineer conducts scheduled on-site reviews and inspections of the mining operations, scales and sampling systems of each vendor up to twice a year, and likewise may conduct unscheduled visits. Additionally, LG&E employees may visit a vendor as needed to address problems and issues at any time.

- b. Not applicable.

LOUISVILLE GAS AND ELCTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 10

Responding Witness: Delbert Billiter / Charles R. Schram

Q-10.

- a. State whether LG&E is currently involved in any litigation with its current or former fuel suppliers or transportation vendors.
- b. If yes, for each litigation:
 - (1) Identify the supplier or vendor;
 - (2) Identify the contract involved;
 - (3) State the potential liability or recovery to LG&E;
 - (4) List the issues presented; and
 - (5) Provide a copy of the complaint or other legal pleading that initiated the litigation and any answers or counterclaims. If a copy has previously been filed with the Commission, provide the date on which it was filed and the case in which it was filed.
- c. State the current status of all litigation with suppliers or vendors.

A-10.

- a. LG&E is not currently involved in any litigation with its fuel suppliers or transportation vendors.
- b. Not applicable.
- c. Not applicable.

LOUISVILLE GAS AND ELCTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 11

Responding Witness: Delbert Billiter / Charles R. Schram

Q-11.

- a. For the last six months of the period under review, state if there have been any changes to LG&E's written policies and procedures regarding its fuel procurement?
- b. If yes:
 - (1) Describe the changes;
 - (2) Provide the written policies and procedures as changed;
 - (3) State the date(s) the changes were made; and
 - (4) Explain why the changes were made.
- c. If no, provide the date LG&E's current fuel procurement policies and procedures were last changed, when they were last provided to the Commission, and identify the proceeding in which they were provided.

A-11.

- a-c. During the period under review, there were no changes to The Corporate Fuels and By-Products Procurement Procedures for coal. The Corporate Fuels and By-Products Procurement Procedures were last updated April 1, 2017 and were provided to the Commission in Case No. 2017-00285 in response to Question No. 15.

During the period under review, there were no changes to the Power Supply Commodity Policy – Natural Gas Fuel for Generation. The Power Supply Commodity Policy – Natural Gas Fuel for Generation was last updated August 1, 2017 and was provided to the Commission in Case No. 2018-00021 in response to Question No. 11.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 12

Responding Witness: Stuart A. Wilson

Q-12. For the last six months of the period under review and for the years 2019 and 2020, list all firm power commitments for LG&E for (a) purchases and (b) sales. This list shall identify the electric utility, the amount of commitment in MW, and the purpose of the commitment (i.e., peaking, emergency).

A-12.

a. Firm Purchases

The firm purchases from Ohio Valley Electric Corporation (OVEC) for the review period are shown in the table below. LG&E will purchase its participation ratio (5.63%) of the OVEC released capacity for the months in question.

In addition, LG&E has a capacity purchase and tolling agreement with Bluegrass Generation through April 2019 for 165 MW of peaking capacity from a simple cycle combustion turbine.

Utility	Period	Companies' Amt (MW)	LG&E Portion (MW)	Purpose
OVEC	May 2018	~ 88	~ 61	Baseload
OVEC	Jun 2018	~ 154	~ 107	Baseload
OVEC	Jul 2018	~ 152	~ 105	Baseload
OVEC	Aug 2018	~ 152	~ 105	Baseload
OVEC	Sep 2018	~ 136	~ 94	Baseload
OVEC	Oct 2018	~ 90	~ 62	Baseload
OVEC	Jan 2019	~ 158	~ 109	Baseload
OVEC	Feb 2019	~ 158	~ 109	Baseload
OVEC	Mar 2019	~ 158	~ 109	Baseload
OVEC	Apr 2019	~ 119	~ 82	Baseload
OVEC	May 2019	~ 85	~ 59	Baseload
OVEC	Jun 2019	~ 143	~ 99	Baseload
OVEC	Jul 2019	~ 152	~ 105	Baseload
OVEC	Aug 2019	~ 152	~ 105	Baseload
OVEC	Sep 2019	~ 119	~ 82	Baseload
OVEC	Oct 2019	~ 99	~ 68	Baseload
OVEC	Nov 2019	~ 143	~ 99	Baseload
OVEC	Dec 2019	~ 158	~ 109	Baseload
OVEC	Jan 2020	~ 158	~ 109	Baseload
OVEC	Feb 2020	~ 158	~ 109	Baseload
OVEC	Mar 2020	~ 155	~ 107	Baseload
OVEC	Apr 2020	~ 124	~ 86	Baseload
OVEC	May 2020	~ 85	~ 59	Baseload
OVEC	Jun 2020	~ 145	~ 101	Baseload
OVEC	Jul 2020	~ 152	~ 105	Baseload
OVEC	Aug 2020	~ 152	~ 105	Baseload
OVEC	Sep 2020	~ 100	~ 69	Baseload
OVEC	Oct 2020	~ 102	~ 71	Baseload
OVEC	Nov 2020	~ 154	~ 107	Baseload
OVEC	Dec 2020	~ 158	~ 109	Baseload

b. Firm Sales - None

LOUISVILLE GAS AND ELCTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 13

Responding Witness: Derek A. Rahn

- Q-13. Provide a monthly billing summary of sales to all electric utilities for the last six months of the period under review.
- A-13. See Page 2, Sheet 1 of 3 of the May 2018 through October 2018 monthly Form B filings that were previously filed with the Commission.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 14

Responding Witness: Derek A. Rahn

Q-14. Describe the effect on the FAC calculation of line losses related to:

- a. Intersystem sales when using a third-party transmission system, and
- b. Intersystem sales when not using a third-party transmission system.

A-14.

- a-b. Line losses related to inter-system sales are calculated using a loss factor of 0.5% whether the inter-system sale requires a third party transmission system or not. This practice is consistent with the Commission's June 7, 2013, Amended Order in Case No. 2012-00553.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 15

Responding Witness: Michael P. Drake

Q-15. Provide a list, in chronological order, showing by unit, any scheduled, actual, and forced outages between for the last six months of the period under review. Provide a key for any information that is abbreviated.

A-15. See attached.

Louisville Gas & Electric Company
May 2018 through October 2018

Unit and Outage Type (F=Forced; S=Scheduled)	Scheduled		Actual*		HOURS OF DURATION		REASON FOR DEVIATION FROM SCHEDULED MAINTENANCE OR REASON FOR FORCED OUTAGE AS APPROPRIATE	
	FROM	TO	FROM	TO	Scheduled	Actual*		
Mill Creek Unit 1 - Coal - 300 MW	S	5/5/2018 22:17	5/6/2018 21:36	5/5/2018 22:17	5/6/2018 21:36	23:19	23:19	Turbine EHC System repair
In-service August 1972	S	5/11/2018 21:44	5/13/2018 9:40	5/11/2018 21:44	5/13/2018 9:40	35:56	35:56	Boiler waterwall tube leak repair
	S	6/22/2018 0:44	6/24/2018 23:59	6/22/2018 0:44	6/24/2018 23:59	71:15	71:15	Air heater wash
	S	6/24/2018 23:59	6/25/2018 9:07	6/24/2018 23:59	6/25/2018 9:07	9:08	9:08	Air heater wash
Mill Creek Unit 2 - Coal - 295 MW	S	3/10/2018 0:00	5/7/2018 0:00	3/9/2018 22:37	5/7/2018 0:00	1392:00	1393:23	Major turbine overhaul
In-service July 1974	S	5/7/2018 0:00	5/8/2018 5:26	5/7/2018 0:00	5/8/2018 5:26	29:26	29:26	Major turbine overhaul
	S	5/8/2018 12:32	5/8/2018 21:08	5/8/2018 12:32	5/8/2018 21:08	8:36	8:36	Turbine Vibration
	S	5/8/2018 22:17	5/9/2018 21:01	5/8/2018 22:17	5/9/2018 21:01	22:44	22:44	Turbine Vibration
	F			5/27/2018 6:28	5/27/2018 16:13		9:45	Turbine controls and turning gear
	S	8/16/2018 22:03	8/20/2018 0:00	8/16/2018 22:03	8/20/2018 0:00	73:57	73:57	Main stop valves
	S	8/20/2018 0:00	8/20/2018 17:14	8/20/2018 0:00	8/20/2018 17:14	17:14	17:14	Main stop valves
Mill Creek Unit 3 - Coal - 394 MW	S	4/30/2018 0:00	5/2/2018 7:40	4/30/2018 0:00	5/2/2018 7:40	55:40	55:40	Minor boiler outage extension
In-service August 1978	S	6/12/2018 0:32	6/12/2018 13:03	6/12/2018 0:32	6/12/2018 13:03	12:31	12:31	Air heater coils
Mill Creek Unit 4 - Coal - 486 MW	S	5/16/2018 22:28	5/21/2018 0:23	5/16/2018 22:28	5/21/2018 0:23	97:55	97:55	Air heater wash
In-service September 1982	S	7/6/2018 9:09	7/7/2018 2:23	7/6/2018 9:09	7/7/2018 2:23	17:14	17:14	Turbine Gland Seal System
	F			9/19/2018 4:27	9/20/2018 2:00		21:33	Generator Protective Relay Fault
	S	9/28/2018 1:19	9/29/2018 0:00	9/28/2018 1:19	9/29/2018 0:00	22:41	22:41	Bottom Ash System
	S	9/29/2018 0:00	11/26/2018 0:00	9/29/2018 0:00	11/23/2018 22:57	1392:00	1342:57	Bottom Ash System
Trimble County Unit 1 - Coal - 370 MW	F			5/1/2018 18:31	5/4/2018 0:25		53:54	Turbine Valve Maintenance
In-service December 1990	S	5/4/2018 0:25	5/6/2018 0:16	5/4/2018 0:25	5/6/2018 0:16	47:51	47:51	Air heater wash
75% ownership share of 511 MW	F			5/6/2018 0:28	5/6/2018 7:33		7:05	Motor Operated Disconnect maintenance
	S	8/24/2018 1:07	8/26/2018 9:48	8/24/2018 1:07	8/26/2018 9:48	56:41	56:41	Boiler reheat tube leak repair
	F			9/12/2018 22:40	9/14/2018 16:03		41:23	Condenser tube leak repair
Trimble County Unit 2 - Coal - 570 MW	S	4/30/2018 0:00	5/12/2018 23:11	4/30/2018 0:00	5/12/2018 23:11	311:11	311:11	Major Turbine Overhaul

Louisville Gas & Electric Company
May 2018 through October 2018

Unit and Outage Type (F=Forced; S=Scheduled)	Scheduled		Actual*		HOURS OF DURATION		REASON FOR DEVIATION FROM SCHEDULED MAINTENANCE OR REASON FOR FORCED OUTAGE AS APPROPRIATE	
	FROM	TO	FROM	TO	Scheduled	Actual*		
In-service January 2011	F		5/13/2018 0:19	5/13/2018 6:35		6:16	Gas Ignition System Error	
75% ownership share of 732 MW jointly owned with KU	S	5/13/2018 12:18	5/19/2018 1:35	5/13/2018 12:18	5/19/2018 1:35	133:17	133:17	Turbine bearing inspection and adjustment
	S	5/19/2018 13:47	5/24/2018 16:19	5/19/2018 13:47	5/24/2018 16:19	122:32	122:32	Main stop valves
	F		5/27/2018 17:29	5/28/2018 10:16		16:47		Forced Draft Fan Repair
	F		5/29/2018 20:05	5/30/2018 7:10		11:05		Boiler Feed Pump Control Error
	S	6/21/2018 2:53	6/25/2018 5:13	6/21/2018 2:53	6/25/2018 5:13	98:20	98:20	Main stop valves
Cane Run Unit 7 - Gas CC - 683 MW	S	10/11/2018 22:08	10/13/2018 0:00	10/11/2018 22:08	10/13/2018 0:00	25:52	25:52	Crank test auxillary power diesel generator
In-service June 2015	S	10/13/2018 0:00	10/29/2018 0:00	10/13/2018 0:00	11/5/2018 0:00	384:00	552:00	General Turbine Inspection
Jointly owned with KU								
E. W. Brown Unit 5 - Gas CT - 130 MW	S	6/6/2018 6:52	6/6/2018 14:38	6/6/2018 6:52	6/6/2018 14:38	7:46	7:46	Inspection of turbine instrumentation
In-service June 2001	F		8/23/2018 19:00	8/24/2018 13:33		18:33		Replace turbine emergency DC lube oil pump motor
Jointly owned with KU	S	9/13/2018 6:20	9/13/2018 14:40	9/13/2018 6:20	9/13/2018 14:40	8:20	8:20	Install cable to contol cabinet enclosure
	S	9/21/2018 7:54	9/22/2018 0:00	9/21/2018 7:54	9/22/2018 0:00	16:06	16:06	Generator and controls repairs begin early
	S			9/22/2018 0:00	10/1/2018 0:01		216:01	Generator and controls repairs
	S	10/1/2018 0:01	10/1/2018 14:50	10/1/2018 0:01	10/1/2018 14:50	14:49	14:49	Generator and controls repairs (extension)
	S	10/12/2018 5:07	10/12/2018 16:01	10/12/2018 5:07	10/12/2018 16:01	10:54	10:54	Main transformer testing
	F			10/23/2018 9:22	10/24/2018 17:04		31:42	Rotor barring pump motor replaced
E. W. Brown Unit 6 - Gas CT - 171 MW	S	5/7/2018 6:28	5/7/2018 14:56	5/7/2018 6:28	5/7/2018 14:56	8:28	8:28	Ignition system repairs
In-service August 1999	S	8/15/2018 6:27	8/15/2018 16:53	8/15/2018 6:27	8/15/2018 16:53	10:26	10:26	Voltage regulator annual maintenance
Jointly owned with KU								
E. W. Brown Unit 7 - Gas CT - 171 MW	F			6/18/2018 12:58	6/19/2018 8:00		19:02	Control card replaced
In-service August 1999	S	9/12/2018 5:50	9/12/2018 15:33	9/12/2018 5:50	9/12/2018 15:33	9:43	9:43	Substation breaker testing
Jointly owned with KU								
Cane Run Unit 11 - Gas CT - 14 MW	S	7/29/2018 4:30	8/2/2018 11:09	7/29/2018 4:30	8/2/2018 11:09	102:39	102:39	Substation maintenance

Louisville Gas & Electric Company
May 2018 through October 2018

Unit and Outage Type (F=Forced; S=Scheduled)	Scheduled		Actual*		HOURS OF DURATION		REASON FOR DEVIATION FROM SCHEDULED MAINTENANCE OR REASON FOR FORCED OUTAGE AS APPROPRIATE	
	FROM	TO	FROM	TO	Scheduled	Actual*		
In-service June 1968	F		8/21/2018 8:31	9/12/2018 14:00		533:29	Starting System Failure	
	F		9/12/2018 14:00	10/23/2018 13:02		983:02	Starting System Failure	
Paddys Run Unit 11 - Gas CT - 13 MW	F		4/25/2018 7:24	5/15/2018 12:50		485:26	Starting System Failure	
In-service June 1968	F		8/23/2018 9:35	8/28/2018 12:34		122:59	Starting System Failure	
Paddys Run Unit 12 - Gas CT - 28 MW	F		6/7/2018 10:00	7/6/2018 12:38		698:38	Generator Protective Relay Fault	
In-service July 1968								
Paddys Run Unit 13 - Gas CT - 175 MW	S	9/21/2018 5:45	9/24/2018 0:00	9/21/2018 5:45	9/24/2018 0:00	66:15	66:15	Generator Inspection
In-service June 2001	S	9/24/2018 0:00	9/24/2018 19:00	9/24/2018 0:00	9/24/2018 19:00	19:00	19:00	Generator Inspection
Jointly owned with KU	S	10/6/2018 0:00	10/15/2018 0:00	10/27/2018 4:50	11/7/2018 11:43	216:00	270:53	Combustion Turbine Inspection
Trimble County Unit 5 - Gas CT - 179 MW	S	7/20/2018 23:04	7/22/2018 12:00	7/20/2018 23:04	7/22/2018 12:00	36:56	36:56	Generator Step Up (GSU) transformer oil leak repair
In-service May 2002	S	9/25/2018 2:00	9/25/2018 15:56	9/25/2018 2:00	9/25/2018 15:56	13:56	13:56	Switchyard maintenance/repair
Jointly owned with KU								
Trimble County Unit 6 - Gas CT - 179 MW	S	9/25/2018 5:28	9/25/2018 15:56	9/25/2018 5:28	9/25/2018 15:56	10:28	10:28	Switchyard maintenance/repair
In-service May 2002								
Jointly owned with KU								
Trimble County Unit 7 - Gas CT - 179 MW	S	7/16/2018 22:00	7/19/2018 19:25	7/16/2018 22:00	7/19/2018 19:25	69:25	69:25	Combustion Turbine Exhaust duct/stack
In-service June 2004	S	9/25/2018 5:28	9/25/2018 16:11	9/25/2018 5:28	9/25/2018 16:11	10:43	10:43	Switchyard maintenance/repair
Jointly owned with KU	S	9/28/2018 7:09	9/28/2018 14:52	9/28/2018 7:09	9/28/2018 14:52	7:43	7:43	Combustion Turbine Crane
	S	10/6/2018 0:00	11/19/2018 0:00	10/10/2018 7:04	11/17/2018 19:03	1056:00	923:59	Combustion Turbine Gas Path Inspection
Trimble County Unit 8 - Gas CT - 179 MW	S	4/28/2018 0:00	5/7/2018 0:00	5/19/2018 0:00	5/27/2018 9:01	216:00	201:01	Circuit Breaker - Repair
In-service June 2004	S	11/3/2018 0:00	11/19/2018 0:00	10/20/2018 0:17	11/3/2018 7:42	384:00	343:25	Turbine control system maintenance
Jointly owned with KU								
Trimble County Unit 9 - Gas CT - 179 MW	S	4/21/2018 0:00	5/7/2018 0:00	5/11/2018 21:45	5/27/2018 10:38	384:00	372:53	Circuit Breaker - Repair
In-service July 2004	S	6/9/2018 3:14	6/9/2018 21:32	6/9/2018 3:14	6/9/2018 21:32	18:18	18:18	Lube oil system

Louisville Gas & Electric Company
 May 2018 through October 2018

Unit and Outage Type (F=Forced; S=Scheduled)	Scheduled		Actual*		HOURS OF DURATION		REASON FOR DEVIATION FROM SCHEDULED MAINTENANCE OR REASON FOR FORCED OUTAGE AS APPROPRIATE	
	FROM	TO	FROM	TO	Scheduled	Actual*		
Jointly owned with KU	F			10/6/2018 10:57	10/7/2018 15:40		28:43	Turbine Control System
	S	10/20/2018 7:00	10/20/2018 15:00	10/20/2018 7:00	10/20/2018 15:00	8:00	8:00	Startup System
Trimble County Unit 10 - Gas CT - 179 MW	S	4/28/2018 0:00	5/14/2018 0:00	5/19/2018 0:00	6/1/2018 12:17	384:00	324:17	Circuit Breaker - Repair
In-service July 2004	F			9/7/2018 21:47	9/8/2018 20:45		22:58	Fuel Gas System
Jointly owned with KU	S	10/20/2018 7:00	10/20/2018 15:00	10/20/2018 7:00	10/20/2018 15:00	8:00	8:00	Startup System
Zorn Unit 1 - Gas CT - 16 MW	F			5/8/2018 11:04	1/1/2019 0:00		5700:56	Controls System Failure
In-service May 1969								

*Actual outages dates and hours of duration include scheduled and forced outages.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 16

Responding Witness: Stuart A. Wilson

Q-16. For the last six months of the period under review, provide the monthly capacity factor at which each generating unit operated.

A-16. See attached.

Louisville Gas & Electric
Unit Monthly Capacity Factors

Unit	Capacity Factor (%) (Net MWh)/(period hrs x MW rating)					
	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018
Brown 5	17.5	15.2	12.0	14.2	9.2	12.0
Brown 6	8.7	0.0	2.6	0.0	0.7	1.4
Brown 7	14.5	1.9	6.4	2.8	3.7	3.0
Brown Solar	27.7	28.7	28.1	24.1	17.6	18.6
Cane Run 7	90.6	62.6	81.0	91.9	88.0	30.6
Cane Run 11	0.0	0.0	0.0	0.0	0.0	0.0
Mill Creek 1	78.6	72.4	75.3	75.1	69.0	76.9
Mill Creek 2	53.8	76.2	73.2	65.7	69.5	81.5
Mill Creek 3	79.0	81.8	78.7	82.0	75.5	83.8
Mill Creek 4	66.5	78.4	76.8	80.5	65.6	0.0
Ohio Falls 1	17.0	21.2	32.1	23.0	0.8	31.0
Ohio Falls 2	26.1	36.1	48.2	37.6	1.8	23.6
Ohio Falls 3	32.0	49.9	21.9	64.7	18.2	29.5
Ohio Falls 4	28.5	43.0	50.0	46.1	8.9	29.0
Ohio Falls 5	31.4	43.0	58.6	58.1	12.2	41.4
Ohio Falls 6	36.4	53.0	65.9	73.7	27.7	49.2
Ohio Falls 7	0.0	0.0	0.0	0.0	0.0	0.0
Ohio Falls 8	40.3	56.1	72.1	74.0	27.8	52.8
Paddy's Run 11	0.0	0.0	0.0	0.0	0.0	0.0
Paddy's Run 12	0.0	0.0	0.0	0.0	0.0	0.0
Paddy's Run 13	8.1	6.5	6.9	6.0	4.2	5.4
Trimble County 1	73.7	86.9	90.7	84.2	84.0	92.2
Trimble County 2	14.4	81.9	94.5	95.9	93.7	96.6
Trimble County 5	4.8	2.3	0.7	12.7	13.3	24.7
Trimble County 6	9.5	4.9	5.9	11.1	10.7	20.9
Trimble County 7	20.3	16.6	15.5	19.6	12.5	6.6
Trimble County 8	13.6	16.0	14.2	13.4	6.9	3.8
Trimble County 9	6.9	8.3	14.1	7.5	5.6	13.7
Trimble County 10	0.3	2.9	2.1	1.1	1.8	3.9
Zorn	0.0	0.0	0.0	0.0	0.0	0.0

Notes: 1 – Trimble County values reflect 100% of the unit. Trimble County 2 is owned by KU (60.75%), LG&E (14.25%), IMPA (12.88%), and IMEA (12.12%).

2 – The North American Electric Reliability Council Generation Availability Data System defines capacity factor as the value equal to the net MWh produced divided by the product of the hours in the period and the unit rating.

3 – Jointly owned units are shown for both LG&E and KU and include Brown 5-7, Cane Run 7, Paddy's Run 13, Trimble County 2, and Trimble County 5-10.

LOUISVILLE GAS AND ELCTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 17

Responding Witness: Michael P. Drake

Q-17.

- a. For the last six months of the period under review, explain if LG&E made any changes to its maintenance and operation practices, or completed any specific generation efficiency improvements that affect fuel usage at LG&E's generation facilities.
- b. Describe the impact of these changes on LG&E's fuel usage.

A-17.

- a-b. There have been no maintenance or operation practice changes that affect fuel usage during the period under review. LG&E strives to maintain unit efficiency through routine cyclic planned outage maintenance. This maintenance work continues to focus on reestablishing expected turbine efficiency through continuous monitoring of all plan systems during operation. LG&E contracts Black and Veatch to provide this monitoring on larger units to identify trends which indicate a potential efficiency loss of any system component. Black and Veatch sends notification to the generating stations which track the potential issues through resolution. In evaluating potential major component projects or replacements that may impact efficiency, LG&E must balance any potential efficiency benefit associated with the project against both costs and potential implications under the Clean Air Act. LG&E has not realized any efficiency improvements through major component projects during this period.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 18

Responding Witness: Delbert Billiter / Charles R. Schram

- Q-18. State whether LG&E is aware of any violations of its policies and procedures regarding fuel procurement that occurred prior to or during the last six months of the period under review.
- A-18. LG&E is not aware of any violations of its policies and procedures regarding fuel procurement that occurred prior to or during the period under review.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 19

Responding Witness: Derek A. Rahn

- Q-19. State whether LG&E is aware of any violations of 807 KAR 5:056 that occurred prior to or during the last six months of the period under review.
- A-19. LG&E is not aware of any violations of 807 KAR 5:056 that occurred prior to or during the period under review.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 20

Responding Witness: Derek A. Rahn

- Q-20. State whether all fuel contracts related to commodity and transportation have been filed with the Commission. If any contracts have not been filed, explain why they have not been filed and provide a copy.
- A-20. For the periods under review, all fuel contracts related to commodity and/or transportation have been filed with the Commission.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 21

Responding Witness: Delbert Billiter

Q-21. For each generating station, state the methods of coal delivery currently available.

A-21.

- a. Mill Creek – Rail and Barge
- b. Trimble County - Barge

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 22

Responding Witness: Derek A. Rahn

- Q-22. If a change in the base fuel cost is proposed, state the month to be used as the base period (b). If the base period results in a fuel cost other than one representative of current costs as prescribed by 807 KAR 5:056, Section 1 (2), explain why this base period was selected. If no change is proposed, include an explanation of the reason(s) LG&E believes the current base period fuel cost should remain unchanged.
- A-22. LG&E does not propose to change the current per unit base fuel cost of \$0.02428 per kWh. As shown in the attached, the Company's average fuel cost during this two year review period (November 2016 to October 2018) was \$0.02438 per kWh. For the last twelve months of the review period (November 2017 to October 2018), the fuel costs have average \$0.02420. Based on the Company's current forecast, LG&E is projecting an average fuel cost of \$0.02426 per kWh in 2019, and \$0.02389 per kWh in 2020.

The combination of actual fuel cost over the last twelve months and the forecasted fuel cost indicate that the current base fuel cost is reasonable. Further, leaving the base fuel cost unchanged would simplify tariff revisions and avoid unnecessary customer confusion.

See the attached for actual fuel expenses for the months in the two year review, as well as the forecasted fuel expenses for 2019 and 2020.

Louisville Gas and Electric Company
Retail Fuel Adjustment Clause
Fuel Cost per kWh
For the Expense Months Ending October 31, 2018

Actual*							
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line No.	Expense Month	Billing Month	Fuel Expense	kWh Sales	Expense Month (\$/kWh) (Col. c / d)	FAC Base (\$/kWh)	Billing Month FAC Factor (Col. e - f)
(1)	Nov-16	Jan-17	\$ 20,079,047	836,378,037	\$ 0.02401	\$ 0.02725	\$ (0.00324)
(2)	Dec-16	Feb-17	\$ 25,158,295	969,082,506	\$ 0.02596	\$ 0.02725	\$ (0.00129)
(3)	Jan-17	Mar-17	\$ 25,585,204	930,921,760	\$ 0.02748	\$ 0.02725	\$ 0.00023
(4)	Feb-17	Apr-17	\$ 19,888,253	789,709,351	\$ 0.02518	\$ 0.02725	\$ (0.00207)
(5)	Mar-17	May-17	\$ 20,463,324	877,042,812	\$ 0.02333	\$ 0.02725	\$ (0.00392)
(6)	Apr-17	Jun-17	\$ 20,538,048	838,472,683	\$ 0.02449	\$ 0.02725	\$ (0.00276)
(7)	May-17	Jul-17	\$ 23,756,364	960,532,970	\$ 0.02473	\$ 0.02725	\$ (0.00252)
(8)	Jun-17	Aug-17	\$ 26,992,982	1,087,467,208	\$ 0.02482	\$ 0.02725	\$ (0.00243)
(9)	Jul-17	Sep-17	\$ 30,129,221	1,244,480,113	\$ 0.02421	\$ 0.02725	\$ (0.00304)
(10)	Aug-17	Oct-17	\$ 27,046,330	1,142,087,413	\$ 0.02368	\$ 0.02725	\$ (0.00357)
(11)	Sep-17	Nov-17	\$ 22,943,967	969,539,483	\$ 0.02366	\$ 0.02428	\$ (0.00062)
(12)	Oct-17	Dec-17	\$ 20,707,799	888,717,917	\$ 0.02330	\$ 0.02428	\$ (0.00098)
(13)	Nov-17	Jan-18	\$ 20,822,505	850,555,875	\$ 0.02448	\$ 0.02428	\$ 0.00020
(14)	Dec-17	Feb-18	\$ 22,858,067	962,296,096	\$ 0.02375	\$ 0.02428	\$ (0.00053)
(15)	Jan-18	Mar-18	\$ 27,673,042	1,036,841,802	\$ 0.02669	\$ 0.02428	\$ 0.00241
(16)	Feb-18	Apr-18	\$ 21,362,914	832,680,123	\$ 0.02566	\$ 0.02428	\$ 0.00138
(17)	Mar-18	May-18	\$ 21,311,876	891,445,176	\$ 0.02391	\$ 0.02428	\$ (0.00037)
(18)	Apr-18	Jun-18	\$ 19,715,145	820,855,227	\$ 0.02402	\$ 0.02428	\$ (0.00026)
(19)	May-18	Jul-18	\$ 25,527,238	1,078,042,190	\$ 0.02368	\$ 0.02428	\$ (0.00060)
(20)	Jun-18	Aug-18	\$ 26,988,441	1,155,263,376	\$ 0.02336	\$ 0.02428	\$ (0.00092)
(21)	Jul-18	Sep-18	\$ 29,100,000	1,230,027,571	\$ 0.02366	\$ 0.02428	\$ (0.00062)
(22)	Aug-18	Oct-18	\$ 28,781,511	1,229,076,849	\$ 0.02342	\$ 0.02428	\$ (0.00086)
(23)	Sep-18	Nov-18	\$ 25,513,230	1,050,266,025	\$ 0.02429	\$ 0.02428	\$ 0.00001
(24)	Oct-18	Dec-18	\$ 22,543,878	936,207,543	\$ 0.02408	\$ 0.02428	\$ (0.00020)
(25)	Overall Average		\$ 23,978,612	983,666,254	\$ 0.02438	\$ 0.02428	\$ 0.00010
(26)	Average for the Last Twelve Months		\$ 24,349,821	\$ 1,006,129,821	\$ 0.02420	\$ 0.02428	\$ (0.00008)

*Source: Form A Monthly Filings to the Kentucky Public Service Commission

Louisville Gas and Electric Company
Forecasted Retail Fuel Adjustment Clause
Fuel Cost per kWh
2019 and 2020

Forecast					
	(a)	(b)	(c)	(d)	(e)
Line No.	Expense Month	Billing Month	Forecasted Fuel Expense	Forecasted kWh Sales	Forecasted Expense Month (\$/kWh) (Col. c / d)
(1)	Jan-19	Mar-19	\$ 23,759,074	961,277,200	\$ 0.02472
(2)	Feb-19	Apr-19	\$ 20,787,749	839,764,067	\$ 0.02475
(3)	Mar-19	May-19	\$ 22,283,416	893,439,847	\$ 0.02494
(4)	Apr-19	Jun-19	\$ 19,547,478	800,654,543	\$ 0.02441
(5)	May-19	Jul-19	\$ 22,697,941	961,439,461	\$ 0.02361
(6)	Jun-19	Aug-19	\$ 25,164,179	1,068,331,394	\$ 0.02355
(7)	Jul-19	Sep-19	\$ 28,870,908	1,215,440,394	\$ 0.02375
(8)	Aug-19	Oct-19	\$ 30,105,585	1,232,044,802	\$ 0.02444
(9)	Sep-19	Nov-19	\$ 23,522,563	981,841,518	\$ 0.02396
(10)	Oct-19	Dec-19	\$ 20,296,896	826,541,279	\$ 0.02456
(11)	Nov-19	Jan-20	\$ 20,516,533	857,854,965	\$ 0.02392
(12)	Dec-19	Feb-20	\$ 22,666,282	911,140,257	\$ 0.02488
(13)	Jan-20	Mar-20	\$ 24,048,731	960,385,304	\$ 0.02504
(14)	Feb-20	Apr-20	\$ 20,768,183	839,157,635	\$ 0.02475
(15)	Mar-20	May-20	\$ 22,501,118	905,399,335	\$ 0.02485
(16)	Apr-20	Jun-20	\$ 18,959,106	799,967,088	\$ 0.02370
(17)	May-20	Jul-20	\$ 22,575,280	961,147,190	\$ 0.02349
(18)	Jun-20	Aug-20	\$ 24,945,529	1,068,372,824	\$ 0.02335
(19)	Jul-20	Sep-20	\$ 28,705,698	1,215,417,048	\$ 0.02362
(20)	Aug-20	Oct-20	\$ 29,021,301	1,232,184,925	\$ 0.02355
(21)	Sep-20	Nov-20	\$ 23,151,813	981,941,515	\$ 0.02358
(22)	Oct-20	Dec-20	\$ 19,247,888	826,251,328	\$ 0.02330
(23)	Nov-20	Jan-21	\$ 19,994,515	857,239,564	\$ 0.02332
(24)	Dec-20	Feb-21	\$ 22,233,490	910,454,894	\$ 0.02442
(25)	Overall Average		\$ 23,182,136	962,820,349	\$ 0.02408
(26)	2019 Average		\$ 23,351,550	962,480,811	\$ 0.02426
(27)	2020 Average		\$ 23,012,721	963,159,887	\$ 0.02389

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 23

Responding Witness: Derek A. Rahn

Q-23. Provide a calculation of the fossil fuel costs F(b) that LG&E proposes to use to calculate the base period fuel cost. This calculation shall show each component of F(b) as defined by 807 KAR 5:056. Explain why the fuel cost in the selected base period is representative of the level of fuel cost currently being experienced by LG&E.

A-23. See the response to Question No. 22.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 24

Responding Witness: Derek A. Rahn

- Q-24. Provide a schedule showing each component of sales as defined by 807 KAR 5:056 in the selected base period (b). Explain why LG&E believes that the sales in the selected base period (b) are representative of the level of kWh sales that LG&E will derive from the level of fuel cost incurred during the selected base period (b).
- a. Separately provide the amounts of power purchases used in the calculation of sales provided.
 - b. Separately provide the amounts of intersystem power sales used in the calculation of sales provided.
- A-24. See the response to Question No. 22.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 25

Responding Witness: Derek A. Rahn

- Q-25. Provide a schedule showing the calculation of LG&E's proposed increase or decrease in its base fuel cost per kWh to be incorporated into its base rate.
- A-25. See the response to Question No. 22.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 26

Responding Witness: Derek A. Rahn

- Q-26. Provide a schedule of the present and proposed rates that LG&E seeks to change pursuant to 807 KAR 5:056, shown in comparative form.
- A-26. See the response to Question No. 22.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 27

Responding Witness: Derek A. Rahn

Q-27. Provide a copy of the current tariff showing by cross-outs and inserts all proposed changes in rates.

A-27. See the response to Question No. 22.

LOUISVILLE GAS AND ELCTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 28

Responding Witness: Stuart A. Wilson

Q-28. For the years ending October 31, 2017, and October 31, 2018, provide:

- a. Maximum annual system demand; and
- b. Average annual demand.

A-28.

- a. Maximum annual system demand:

<u>Year Ending</u>	<u>Peak Demand (MW)</u>
October 31, 2017	2,608
October 31, 2018	2,618

- b. Average annual system demand:

<u>Year Ending</u>	<u>Average Demand (MW)*</u>
October 31, 2017	1,397
October 31, 2018	1,458

*Average demand is calculated as the year ending energy divided by the hours per year.

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 29

Responding Witness: Derek A. Rahn

Q-29.

- a. Provide a schedule of the calculation of the 12-month average line loss by month for November 2016 through October 2018.
- b. Describe the actions that LG&E has taken to reduce line loss during this period.

A-29.

- a. See attached.
- b. LG&E upgraded to provide reliable electric service. All enhancements contribute to a system that will operate with potentially fewer line losses. New line construction and transformer additions provide facilities which may reduce the current in existing facilities, thus allowing power the path of least resistance. Replacing existing conductors with larger conductors or replacing existing transformers with larger transformers also reduce the resistance. Adding capacitors near the load reduces system reactive power (VAR) requirements and line and transformer currents. Any reduction in current and/or resistance results in reduced losses. The Company's planning and design objective is to provide a reliable transmission and distribution system at a reasonable cost. For Transmission and Distribution, the cost for losses are evaluated as outlined below.

Transmission:

The cost of transmission line losses is included in the economic analysis when evaluating the cost of alternative projects. The costs of core and copper losses are incorporated into the selection of all transmission transformers.

Distribution:

Losses are evaluated in the selection of standard line materials (cables, wires, distribution transformers, etc.) and distribution substation transformers. Total ownership cost, which includes the cost of no-load, load and auxiliary losses, is incorporated into the selection of distribution and substation transformers.

Louisville Gas & Electric

**12 Month Average Line Loss
November 2016 to October 2018**

Line	Month	Current Month kWh Sources	Current Month KU Losses	12 Months to Date kWh Sources	12 Months to Date Overall System Losses	12 Months End Percent Losses
(a)	(b)	(f)		(c)	(d)	(e) (d) / (c)
1	Nov-16	877,995,000	31,369,341	12,483,973,000	592,166,394	4.740%
2	Dec-16	1,014,990,000	47,158,903	12,567,625,000	600,401,252	4.780%
3	Jan-17	975,400,000	33,850,450	12,496,132,000	569,585,841	4.560%
4	Feb-17	827,094,000	46,157,477	12,388,068,000	559,508,154	4.520%
5	Mar-17	917,121,000	10,191,534	12,395,935,000	542,021,959	4.370%
6	Apr-17	877,247,000	41,443,924	12,394,169,000	547,360,489	4.420%
7	May-17	1,003,482,000	26,662,321	12,445,386,000	532,656,577	4.280%
8	Jun-17	1,137,637,000	71,906,295	12,361,296,000	545,305,137	4.410%
9	Jul-17	1,301,213,000	67,891,554	12,360,099,000	538,646,383	4.360%
10	Aug-17	1,193,778,000	44,915,744	12,205,193,000	528,723,810	4.330%
11	Sep-17	1,011,623,000	42,064,437	12,079,624,000	502,758,989	4.160%
12	Oct-17	928,068,000	47,499,380	12,065,648,000	511,111,360	4.240%
13	Nov-17	888,866,000	41,319,989	12,076,519,000	521,062,008	4.310%
14	Dec-17	1,005,429,000	44,328,511	12,066,958,000	518,231,616	4.290%
15	Jan-18	1,083,769,000	43,275,771	12,175,327,000	527,656,937	4.330%
16	Feb-18	870,458,000	48,345,242	12,218,691,000	529,844,702	4.340%
17	Mar-18	933,255,000	28,892,773	12,234,825,000	548,545,941	4.480%
18	Apr-18	858,725,000	31,260,487	12,216,303,000	538,362,504	4.410%
19	May-18	1,129,313,000	48,815,789	12,342,134,000	560,515,972	4.540%
20	Jun-18	1,210,085,000	73,643,617	12,414,582,000	562,253,294	4.530%
21	Jul-18	1,287,318,000	58,003,144	12,400,687,000	552,364,884	4.450%
22	Aug-18	1,286,322,000	47,963,759	12,493,231,000	555,412,899	4.450%
23	Sep-18	1,099,758,000	52,867,613	12,581,366,000	566,216,075	4.500%
24	Oct-18	979,607,000	40,814,002	12,632,905,000	559,530,697	4.430%

LOUISVILLE GAS AND ELCTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 30

Responding Witness: Delbert Billiter / Stuart Wilson

Q-30. Provide the most recent projected fuel requirements for the years 2019 and 2020 in tons for coal, MMBtu for natural gas, and dollars.

A-30. Coal purchases in 2019 Business Plan:

	<u>Tons</u>	<u>Dollars</u>
2019 Projected Coal Purchases	5,585,384	\$260,886,918
2020 Projected Coal Purchases	5,686,765	\$265,940,699

Natural gas purchases in 2019 Business Plan:

	<u>MMBtu</u>	<u>Dollars</u>
2019 Projected Natural Gas Purchases	14,578,453	\$56,112,159
2020 Projected Natural Gas Purchases	13,270,439	\$52,719,801

LOUISVILLE GAS AND ELCTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 31

Responding Witness: Derek A. Rahn

Q-31. Provide the most recent sales projections for the years 2019 and 2020 in kWh and dollars.

A-31. LG&E's most recent sales projections for 2019 and 2020 are:

	<u>Sales (kWh)</u>	<u>Dollars</u>
2019 Ultimate Consumers	11,643,946,180	\$1,109,913,728
2020 Ultimate Consumers	11,652,184,328	\$1,137,814,074

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 32

Responding Witness: Stuart A. Wilson

- Q-32. Provide the planned maintenance schedule for each of the generating units for the years 2019 and 2020.
- A-32. See attached. The information requested is being provided pursuant to a Petition for Confidential Treatment.

2019
LG&E Weekly Maintenance Detail

MAINT WEEK	MC1	MC2	MC3	MC4	TC1	TC2	CR7	Br5	Br6	Br7	PR13	TC5	TC6	TC7	TC8	TC9	TC10	BG3
1/7	300	296	387	482	370	560	691	120	157	157	161	169	169	169	169	169	169	165
1/14																		
1/21																		
1/28																		
2/4																		
2/11																		
2/18																		
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12/9																		
12/16																		
12/23																		
12/30																		

Notes: * Jointly owned units between LG&E/KU
 ■ Bluegrass contract expires 4/30/2019

2020
LG&E Weekly Maintenance Detail

MAINT WEEK	MC1	MC2	MC3	MC4	TC1	TC2	CR7	Br5	Br6	Br7	PR13	TC5	TC6	TC7	TC8	TC9	TC10	BG3
1/7	300	296	387	482	370	560	691	120	157	157	161	169	169	169	169	169	169	165
1/14																		
1/21																		
1/28																		
2/4																		
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12/23																		
12/30																		

Notes: * Jointly owned units between LG&E/KU
 ■ Bluegrass contract expires 4/30/2019

LOUISVILLE GAS AND ELECTRIC COMPANY

**Response to Commission Staff's First Request for Information
Dated February 11, 2019**

Case No. 2019-00005

Question No. 33

Responding Witness: Delbert Billiter / Charles R. Schram

- Q-33. Identify any issues that could affect fuel costs for the two-year period that remain unresolved or unsettled. Include in the response any issues related to billings from a regional transmission operator. Consider this a continuing request to inform the Commission if LG&E becomes aware of any issues during the course of this proceeding.
- A-33. The Company has no unresolved or unsettled issues to report.