COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:		
AN EXAMINATION OF THE APPLICATION)	
OF THE FUEL ADJUSTMENT CLAUSE OF KENTUCKY UTILITIES COMPANY FROM)	CASE NO. 2019-00004
NOVEMBER 1 2016 TO OCTORER 31 2018	í	

RESPONSE OF KENTUCKY UTILITIES COMPANY TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED FEBRUARY 11, 2019

FILED: FEBRUARY 25, 2019

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 Schwary 2019.

July Schooler (SEAL)

Notary Public

My Commission Expires:

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 22 day of february 2019.

Jeedy Schooler (SEAL)

Notary Public

My Commission Expires:

COMMONWEALTH OF KENTUCKY)	
)	SS
COUNTY OF JEFFERSON)	

The undersigned, **Derek Rahn**, being duly sworn, deposes and says that he is Manager - Revenue Requirement COS 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.

Derek Rahn

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 45th day of 4chuay 2019.

Notary Public

Hely Schoder (SEAL)

My Commission Expires:

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 15th day of February 2019.

_(SEAL)

Notary Public

My Commission Expires:

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.

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

Notary Public

My Commission Expires:

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

Case No. 2019-00004

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 KU purchased 3,187,849 tons.

Spot: 8% (255,959 tons)

Contract: 92% (2,931,890 tons)

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

Case No. 2019-00004

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 KU under each contract and page 2 shows the actual combined quantity received by KU and LG&E under each contact.

NO COAL PUT	ko coai Purchases (unioaded) under long-teri	ng-term contract				
May 1, 201	May 1, 2018 thru October 31, 2018					
(a)	(q)	(c)	(p)	(e)	(f)	(8)
		Location of	Delivery	Actual Quantity	Tonnage	Current Price**
Contract/PO	Supplier	Production Facility	Method	Received	Requirement*	(\$/ton)
J17002	Alliance Coal LLC	W-KY	Barge	372,694	1,000,000	\$42.50
J17005	Alliance Coal LLC	W-KY	Rail		200,000	\$38.50
J18003	Alliance Coal LLC	W-KY	Barge	240,441	200,000	\$38.00
J18009	Alliance Coal LLC	W-KY	Barge	68,058	575,000	\$36.00
J16012	Arch Coal Sales Company Inc.	W	Barge	15,072		\$12.60
J18008	Arch Coal Sales Company Inc.	W	Barge	261,779	337,500	\$12.00
J17001	Contura Energy	PA	Barge	30,448		\$38.00
J16005	Eagle River Coal LLC	11	Barge	115,711	210,000	\$51.79
J16018	Foresight Coal Sales LLC	11	Barge	262,470	750,000	\$42.35-IL, \$41.45-W-KY
J18005	Knight Hawk Coal, LLC	1	Barge	165,983	250,000	\$35.05
J16007	Peabody COALSALES LLC	2	Barge, Rail	294,016	375,000	\$45.53-B, \$45.36-B, \$42.31-R
J14001	Rhino Energy LLC	W-KY	Barge	86,611	200,000	\$37.00
J16006	The American Coal Company	IL, WV, W-KY	Barge	424,457	325,000	\$39.60-IL, \$38.60-WV, \$38.70-W-KY
J17004	The American Coal Company	IL, WV, W-KY	Barge	381,377	416,667	\$34.20-IL, \$33.20-WV, \$33.30-W-KY
J18004	Western Ky Minerals, Inc	W-KY	Barge	41,640	78,375	\$38.00
J14010C	Western Ky Consolidated Resources, LLC	W-KY	Rail, Barge	11,332	49,724	\$42.00
J16017B	Western Ky Consolidated Resources, LLC	W-KY	Rail, Barge	4,812	168,869	\$39.50
J18002B	Western Ky Consolidated Resources, LLC	W-KY	Rail, Barge	154,988	617,761	\$41.78
				2,931,890		
	C		1			
ioiiiiage Nedai	TOTHINGS REQUIREMENTS A TAKADIE VOIGINE TO COMPANIE LEGAL AND COAL STATION SIMPLIEURS	alid NO coal station si	Silibilidi			
**Prices vary by	**Prices vary by source/transportation type. Prices as of 10.1.18	18				
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						Page 1 of 2

May 1, 2018 thru October 31, 2018 (c) (c) (a) (b) (c) (c) Contract/PO Supplier Production Facility Met J17002 Alliance Coal LLC W-KY Ba J17005 Alliance Coal LLC W-KY Ba J18003 Alliance Coal LLC W-KY Ba J18009 Alliance Coal LLC W-KY Ba J18009 Alliance Coal LLC W-KY Ba J18009 Alliance Coal LLC W-KY Ba J18001 Arch Coal Sales Company Inc. WY Ba J18005 Arch Coal LLC IL Ba J18006 Knight Haw Coal LLC IL Ba J18007 Peabody COALSALES LLC IL Ba J18006 The American Coal Company IL, WV, W-KY Ba J18007 Peabody COALSALES LLC W-KY Ba J18006 The American Coal Company IL, WV, W-KY Ba J18007 Western Ky Consolidated Resources, LLC	Combined LG&E and KU Coal Purchases (unloaded) under long-term contract	g-term contrac	ند		
Contract/Po Supplier P J17002 Alliance Coal LLC P J17002 Alliance Coal LLC P J18003 Alliance Coal LLC Alliance Coal LLC J18009 Anch Coal Sales Company Inc. J18008 Arch Coal Sales Company Inc. J18008 Arch Coal Sales Company Inc. J18008 Foresight Coal Sales LLC J18005 Foresight Coal Sales LLC J18006 The American Coal Company J16007 Peabody COALSALES LLC J16006 The American Coal Company J16006 The American Coal Company J16007 Western Ky Consolidated Resources, LLC J16017B Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC	8				
Contract/PO Supplier P J17002 Alliance Coal LLC J17005 Alliance Coal LLC J18003 Alliance Coal LLC J18009 Alliance Coal LLC J18009 Arch Coal Sales Company Inc. Arch Coal Sales Company Inc. J18008 Arch Coal Sales Company Inc. Contura Energy J16012 Arch Coal Sales Company Inc. Contura Energy J16005 Eagle River Coal LLC Foresight Coal Sales LLC J16005 Knight Hawk Coal, LLC Foresight Coal Sales LLC J16007 Peabody COALSALES LLC Foresight Coal Sales LLC J16006 The American Coal Company The American Coal Company J17004 The American Coal Company Western Ky Consolidated Resources, LLC J18002B Western Ky C	(c)	(p)	(e)	(f)	(g)
Contract/PO Supplier F J17002 Alliance Coal LLC J18003 Alliance Coal LLC J18003 Alliance Coal LLC J18009 Arch Coal Sales Company Inc. J18009 Arch Coal Sales Company Inc. J18008 Arch Coal Sales Company Inc. J18008 Arch Coal Sales Company Inc. J18008 Arch Coal Sales Company Inc. J18005 Foresight Coal Sales LLC Arch Coal Sales LLC Arch Coal Sales LLC J18005 Knight Hawk Coal, LLC Arch Coal Sales LLC J18007 Peabody COALSALES LLC Arch Coal Sales LLC J18006 The American Coal Company Arch Coal Sales LLC J16006 The American Coal Company Arch Coal Sales LLC J18004 Western Ky Minerals, Inc Arch Coal Company J18004 Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC J18002B	Location of	Delivery	Actual Quantity	Tonnage	Current Price **
117002 Alliance Coal LLC J18003 Alliance Coal LLC J18003 Alliance Coal LLC J18009 Alliance Coal LLC J18009 Arch Coal Sales Company Inc. J18008 Arch Coal Sales Company Inc. J17001 Contura Energy J16005 Eagle River Coal LLC J18005 Foresight Coal Sales LLC J18005 Foresight Coal Sales LLC J18005 Foresight Coal Sales LLC J18007 Peabody COALSALES LLC J18006 The American Coal Company J18004 Western Ky Minerals, Inc J14010C Western Ky Consolidated Resources, LLC J18002B vestern Ky Consolidated Resources, LLC	Production Facility	Method	Received	Requirement*	(\$/ton)
J17005 Alliance Coal LLC J18003 Alliance Coal LLC J18009 Arch Coal Sales Company Inc. J18008 Arch Coal Sales Company Inc. J18008 Arch Coal Sales Company Inc. J18008 Arch Coal Sales Company Inc. J16005 Eagle River Coal LLC J16007 Foresight Coal Sales LLC J16007 Peabody COALSALES LLC J16006 The American Coal Company J16006 The American Coal Company J17004 The American Coal Company J18004 Western Ky Minerals, Inc J16017B Western Ky Consolidated Resources, LLC J16017B Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC *Tonnage Requirement is a ratable volume for combined LG&E a **Prices vary by source/transportation type. Prices as of 10.1.18	W-KY	Barge	922,378	1,000,000	\$42.50
J18003 Alliance Coal LLC J18009 Alliance Coal LLC J16012 Arch Coal Sales Company Inc. J18008 Arch Coal Sales Company Inc. J17001 Contura Energy J16005 Eagle River Coal LLC J16005 Foresight Coal Sales LLC J18005 Knight Hawk Coal, LLC J16007 Peabody COALSALES LLC J16007 Peabody COALSALES LLC J16006 The American Coal Company J17004 The American Coal Company J18004 Western Ky Consolidated Resources, LLC J16017B Western Ky Consolidated Resources, LLC J16002B Vestern Ky Consolidated Resources, LLC J16003B Vestern Ky Consolidated Resources, LLC	W-KY	Rail	381,181	500,000	\$38.50
J18009 Alliance Coal LLC J16012 Arch Coal Sales Company Inc. J18008 Arch Coal Sales Company Inc. J17001 Contura Energy J16005 Eagle River Coal LLC J16007 Foresight Coal Sales LLC J16007 Rhiph Hawk Coal, LLC J16007 Peabody COALSALES LLC J16006 The American Coal Company J17004 The American Coal Company J18004 Western Ky Consolidated Resources, LLC J16017B Western Ky Consolidated Resources, LLC J16002B Vestern Ky Consolidated Resources, LLC J16003B Vestern Ky Consolidated Resources, LLC	W-KY	Barge	482,798	500,000	\$38.00
J16012 Arch Coal Sales Company Inc. J18008 Arch Coal Sales Company Inc. J17001 Contura Energy J16005 Eagle River Coal LLC J18005 Knight Hawk Coal, LLC J16007 Peabody COALSALES LLC J16007 Peabody COALSALES LLC J16006 The American Coal Company J17004 The American Coal Company J18004 Western Ky Minerals, Inc J16017B Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC **Prices vary by source/transportation type. Prices as of 10.1.18	W-KY	Barge	557,856	575,000	\$36.00
178008 Arch Coal Sales Company Inc. J17001 Contura Energy J16005 Eagle River Coal LLC J16018 Foresight Coal Sales LLC J18005 Knight Hawk Coal, LLC J16007 Peabody COALSALES LLC J16007 Rhino Energy LLC J16006 The American Coal Company J17004 The American Coal Company J18004 Western Ky Consolidated Resources, LLC J16017B Western Ky Consolidated Resources, LLC J18002B Source/transportation type. Prices as of 10.1.18	IC. WY	Barge	15,072	ı	\$12.60
17001 Contura Energy J16005 Eagle River Coal LLC J16018 Foresight Coal Sales LLC J16005 Knight Hawk Coal, LLC J16007 Peabody COALSALES LLC J16006 The American Coal Company J17004 The American Coal Company J17004 Western Ky Minerals, Inc J14010C Western Ky Consolidated Resources, LLC J18002B Vestern Ky Consolidated Resources, LLC	IC. WY	Barge	261,779	337,500	\$12.00
146005 Eagle River Coal LLC J16018 Foresight Coal Sales LLC J18005 Knight Hawk Coal, LLC J16007 Peabody COALSALES LLC J16006 The American Coal Company J17004 The American Coal Company J18004 Western Ky Minerals, Inc J14010C Western Ky Consolidated Resources, LLC J18002B Vestern Ky Consolidated Resources, LLC J18002B Vestern Ky Consolidated Resources, LLC J18002B Vestern Ky Consolidated Resources, LLC	PA	Barge	30,448	ı	\$38.00
198005 Knight Coal Sales LLC J18005 Knight Hawk Coal, LLC J16007 Peabody COALSALES LLC J16006 The American Coal Company J17004 The American Coal Company J18004 Western Ky Minerals, Inc J16017B Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC	1	Barge	212,585	210,000	\$51.79
18005 Knight Hawk Coal, LLC J16007 Peabody COALSALES LLC J14001 Rhino Energy LLC J16006 The American Coal Company J17004 The American Coal Company J18004 Western Ky Minerals, Inc J14010C Western Ky Consolidated Resources, LLC J18002B western Ky Consolidated Resources, LLC	=	Barge	740,790	750,000	\$42.35-IL, \$41.45-W-KY
14007 Peabody COALSALES LLC 14001 Rhino Energy LLC 146006 The American Coal Company 17004 The American Coal Company 14010C Western Ky Minerals, Inc 14010C Western Ky Consolidated Resources, LLC 148002B Western Ky Consolidated Resources, LLC 178002B Western Ky Consolidated LC 178002B Western Ky Consolidated LC 178002B Western Ky Consolidated LC 178002B Western Ky Consolidated Resources, LLC	II.	Barge	236,757	250,000	\$35.05
J14001 Rhino Energy LLC J16006 The American Coal Company J17004 The American Coal Company J18004 Western Ky Minerals, Inc J14010C Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated LC *Tonnage Requirement is a ratable volume for combined LG&E a **Prices vary by source/transportation type. Prices as of 10.1.18	2	Barge, Rail	359,503	375,000	\$45.53-B, \$45.36-B, \$42.31-R
116006 The American Coal Company 117004 The American Coal Company 118004 Western Ky Minerals, Inc 114010C Western Ky Consolidated Resources, LLC 118002B Western Ky Consolidated Lcc 118002B Western Ky Consolidated Lcc 118002B Western Ky Consolidated Resources, LLC	W-KY	Barge	182,752	200,000	\$37.00
17004 The American Coal Company J8004 Western Ky Minerals, Inc J14010C Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC *Tonnage Requirement is a ratable volume for combined LG&E a **Prices vary by source/transportation type. Prices as of 10.1.18	IL, WV, W-KY	Barge	434,699	325,000	\$39.60-IL, \$38.60-WV, \$38.70-W-KY
140004 Western Ky Minerals, Inc 140010C Western Ky Consolidated Resources, LLC 146017B Western Ky Consolidated Resources, LLC 148002B Western Ky Consolidated Resources, LLC 148002B Assert Ky Consolidated Resources, LLC 148002B Western Ky Consolidated Resources	IL, WV, W-KY	Barge	500,706	416,667	\$34.20-IL, \$33.20-WV, \$33.30-W-KY
J14010C Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC *Tonnage Requirement is a ratable volume for combined LG&E a**Prices vary by source/transportation type. Prices as of 10.1.18	W-KY	Barge	98,918	78,375	\$38.00
J16017B Western Ky Consolidated Resources, LLC J18002B Western Ky Consolidated Resources, LLC *Tonnage Requirement is a ratable volume for combined LG&E a **Prices vary by source/transportation type. Prices as of 10.1.18		Rail, Barge	64,681	49,724	\$42.00
**Prices vary by source/transportation type. Prices as of 10.1.18	ssources, LLC W-KY	Rail, Barge	138,413	168,869	\$39.50
*Tonnage Requirement is a ratable volume for combined LG&E a **Prices vary by source/transportation type. Prices as of 10.1.18	ssources, LLC W-KY	Rail, Barge	525,381	617,761	\$41.78
*Tonnage Requirement is a ratable volume for combined LG&E a **Prices vary by source/transportation type. Prices as of 10.1.18			6,181,695	6,353,896	
**Prices vary by source/transportation type. Prices as of 10.1.18	combined LG&E and KU coal station	shipments			
	ices as of 10.1.18			Attachme	Attachment to Response to Question No. 2
					BILLITER
					Page 2 of 2

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

Case No. 2019-00004

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:

Total	608,018 Tons; 18 Days	Target 23-44 Days
Trimble County ^{2,3}	202,273 Tons; 32 Days	Target 21-43 Days
Ghent ¹	228,616 Tons; 11 Days	Target 20-38 Days
EW Brown	177,129 Tons; 28 Days	Target 30-55 Days

¹Inventory listed for Ghent does not include the 200,000 tons sold to the Refined Coal facility operator that remains in the onsite coal pile, as previously discussed in Case No. 2015-00264.

²Inventory listed for Trimble County does not include the 42,600 tons sold to the Refined Coal facility operator that remains in the onsite coal pile, as previously discussed in Case No. 2015-00264.

³Trimble County coal inventory tons is KU's allocated ownership of both PRB and High Sulfur coals used for Trimble County 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. No station's inventory exceeds the target amount. Note that the listed inventory level at Ghent (11 days) is much lower than the lower target. However, this does not include the 200,000 tons of inventory sold to the Refined Coal facility operator that remains onsite and is available for KU's use. Including this amount results in an inventory of 20 days. In addition, the Ghent barge unloader was on a scheduled outage at the end of the review period preventing coal unloading. The unloader outage was completed in early November and total inventory (including that owned by the Refined Coal facility operator) onsite on December 31, 2018 was 32 days.
- e. (1) When E.W. Brown Units 1 and 2 are retired, the Brown coal inventory targets will be adjusted to address the new station status. KU does not expect significant changes to its current coal inventory target levels for any other station; however, during the Companies' planning cycle minor adjustments may be made to the inventory targets if warranted.
 - (2) Not applicable.

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

Case No. 2019-00004

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

Response to Question No. 4
Page 2 of 2
Billiter

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.

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

Case No. 2019-00004

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.

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

Case No. 2019-00004

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.

<u>Vendor</u>	Type 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.

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

Case No. 2019-00004

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.

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

Case No. 2019-00004

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. KU does not engage in financial hedging activities for its coal or natural gas purchases.

For coal, there has 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. KU 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 in 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

Response to Question No. 8 Page 2 of 2 Billiter/Schram

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.

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

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

Case No. 2019-00004

Question No. 9

Responding Witness: Delbert Billiter / Charles R. Schram

- Q-9.
- a. State whether KU 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 KU took as a result of the audit.
- A-9.
- a. No. KU has not conducted any financial audits of fuel or transportation contracts.
 - KU's Manager Fuels Technical Services or KU'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, KU employees may visit a vendor as needed to address problems and issues at any time.
- b. Not applicable.

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

Case No. 2019-00004

Question No. 10

Responding Witness: Delbert Billiter / Charles R. Schram

Q-10.

- a. State whether KU 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 KU;
 - (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. KU is not currently involved in any litigation with its fuel suppliers or transportation vendors.
- b. Not applicable.
- c. Not applicable.

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

Case No. 2019-00004

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 KU'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 KU'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. 2017-00284 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. 2018-00020 in response to Question No. 11.

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

Case No. 2019-00004

Question No. 12

Responding Witness: Stuart 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 KU 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. KU will purchase its participation ratio (2.5%) of the OVEC released capacity for the months in question.

		Companies'	KU Portion	
Utility	Period	Amt (MW)	(MW)	Purpose
OVEC	May 2018	~ 88	~ 27	Baseload
OVEC	Jun 2018	~ 154	~ 47	Baseload
OVEC	Jul 2018	~ 152	~ 47	Baseload
OVEC	Aug 2018	~ 152	~ 47	Baseload
OVEC	Sep 2018	~ 136	~ 42	Baseload
OVEC	Oct 2018	~ 90	~ 28	Baseload
OVEC	Jan 2019	~ 158	~ 49	Baseload
OVEC	Feb 2019	~ 158	~ 49	Baseload
OVEC	Mar 2019	~ 158	~ 49	Baseload
OVEC	Apr 2019	~ 119	~ 37	Baseload
OVEC	May 2019	~ 85	~ 26	Baseload
OVEC	Jun 2019	~ 143	~ 44	Baseload
OVEC	Jul 2019	~ 152	~ 47	Baseload
OVEC	Aug 2019	~ 152	~ 47	Baseload
OVEC	Sep 2019	~ 119	~ 37	Baseload
OVEC	Oct 2019	~ 99	~ 30	Baseload
OVEC	Nov 2019	~ 143	~ 44	Baseload
OVEC	Dec 2019	~ 158	~ 49	Baseload
OVEC	Jan 2020	~ 158	~ 49	Baseload
OVEC	Feb 2020	~ 158	~ 49	Baseload
OVEC	Mar 2020	~ 155	~ 48	Baseload
OVEC	Apr 2020	~ 124	~ 38	Baseload
OVEC	May 2020	~ 85	~ 26	Baseload
OVEC	Jun 2020	~ 145	~ 45	Baseload
OVEC	Jul 2020	~ 152	~ 47	Baseload
OVEC	Aug 2020	~ 152	~ 47	Baseload
OVEC	Sep 2020	~ 100	~ 31	Baseload
OVEC	Oct 2020	~ 102	~ 31	Baseload
OVEC	Nov 2020	~ 154	~ 47	Baseload
OVEC	Dec 2020	~ 158	~ 49	Baseload

b. Firm Sales - None

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

Case No. 2019-00004

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.

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

Case No. 2019-00004

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. 2012-00552.

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

Case No. 2019-00004

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.

Unit and Outage Type	Scheduled	I	Act	HOURS OF DURATION		REASON FOR DEVIATION FROM SCHEDULED MAINTENANCE	
(F=Forced; S=Scheduled)		ТО	FROM			OR REASON FOR FORCED OUTAGE AS APPROPRIATE	
,	<u> </u>	-		ТО			
E. W. Brown Unit 1 - Coal - 107 MW	S 4/14/2018 0:00	5/7/2018 0:00	4/13/2018 5:30	5/1/2018 0:00	552:00	426:30	Minor boiler outage
In-service May 1957	S 4/14/2018 0:00	5/7/2018 0:00	5/1/2018 0:00	5/6/2018 15:01	552:00	135:01	FGD Repairs
	S 7/26/2018 6:00	7/27/2018 8:30	7/26/2018 6:00	7/27/2018 8:30	26:30	26:30	Generator hydrogen cooler leak repair
	F		10/27/2018 0:23	10/27/2018 16:52		16:29	Repair turbine/generator turning gear
	_		40/00/0040 00 00	10/00/0010 0 55		0.40	
	I I		10/28/2018 23:36	10/29/2018 8:55		9:19	Repair turbine/generator turning gear
E W Berne Heit O Cool 400 MW	4/7/2040 0:00	F/7/0040 0:00	4/40/0040 00:04	F/4/0040 0:00	700.00	400-00	Minachallanava
E. W. Brown Unit 2 - Coal - 168 MW	S 4/7/2018 0:00	5/7/2018 0:00	4/13/2018 23:24	5/1/2018 0:00	720:00	408:36	Minor boiler outage
In-service June 1963	S 4/7/2018 0:00	5/7/2018 0:00	5/1/2018 0:00	5/6/2018 15:01	720:00	135:01	FGD Repairs
in-service durie 1903	4,172010 0.00	3/1/2010 0.00	3/1/2010 0:00	3/0/2010 13:01	720.00	155.01	1 OD Repails
	F		5/23/2018 10:32	5/23/2018 18:23		7:51	Generator hydrogen cooler leak repair
	f f		0/20/2010 10:02	0/20/2010 10:20		7.01	Contrator Hydrogon Could Tourispan
	S 5/31/2018 18:34	6/1/2018 3:28	5/31/2018 18:34	6/1/2018 3:28	8:54	8:54	Generator hydrogen cooler leak repair
	5,0,0,0,0			3, 1, 2, 1, 2			
	S 6/3/2018 15:07	6/3/2018 21:30	6/3/2018 15:07	6/3/2018 21:30	6:23	6:23	Generator hydrogen cooler leak detector repair
	F		6/3/2018 21:30	6/4/2018 15:44		18:14	Generator hydrogen cooler leak detector repair (continued)
	F		6/5/2018 10:08	6/6/2018 13:27		27:19	Boiler waterwall tube leak repair
	S 7/27/2018 6:00	7/27/2018 13:00	7/27/2018 6:00	7/27/2018 13:00	7:00	7:00	Precipitor Grounding
E. W. Brown Unit 3 - Coal - 413 MW	S 4/14/2018 0:00	5/7/2018 0:00	4/14/2018 1:17	5/1/2018 0:00	552:00	406:43	Minor boiler outage
In-service July 1971	S 5/7/2018 0:00	5/7/2018 9:44	5/7/2018 0:00	5/7/2018 9:44	9:44	9:44	Minor boiler outage (extenstion)
	_						
	S 4/14/2018 0:00	5/7/2018 0:00	5/1/2018 0:00	5/7/2018 0:00	552:00	144:00	FGD Repairs
	_		7/00/0040 40 00	0/5/0040 0 40		074.00	
	IF I		7/20/2018 18:20	8/5/2018 8:48		374:28	Cooling tower storm damage repairs
	8/22/2019 21:14	0/24/2010 12:20	0/22/2010 21:14	9/24/2019 12:20	39:06	30.06	Condensor tube look ropair
	S 8/22/2018 21:14	8/24/2018 12:20	8/22/2018 21:14	8/24/2018 12:20	39.06	39.06	Condenser tube leak repair
	S 9/15/2018 22:19	9/18/2018 23:41	9/15/2018 22:19	9/18/2018 23:41	73:22	72.22	Hotwater recirculation pump general maintenance
	5 9/13/2010 22.19	3/10/2010 23.41	3/13/2010 22.19	3/10/2010 23.41	13.22	13.22	Trotrator regionation pump general maintenance
	S 10/14/2018 21:59	10/22/2018 0:00	10/14/2018 21:59	10/22/2018 0:00	170:01	170:01	Replace hotwater recirculation pump
	10/1/2010 21/00	10,22,2010 0.00	10,11,2010 21.00	10,22,20.00.00			Tourism Parity
	S 10/22/2018 0:00	10/22/2018 8:02	10/22/2018 0:00	10/22/2018 8:02	8:02	8:02	Replace hotwater recirculation pump (extension)
Ghent Unit 1 - Coal - 479 MW	No outages > or = 6 hours						
In-service February 1974							
Ghent Unit 2 - Coal - 486 MW	F		9/7/2018 17:03	9/11/2018 16:01		94:58	Boiler superheat and waterwall tube leak repairs
In-service April 1977							
Ghent Unit 3 - Coal - 476 MW	F		6/16/2018 23:21	6/17/2018 6:07		6:46	Generator stator system transmitter failure

Unit and Outage Type (F=Forced; S=Scheduled)		Scheduled		Actual*		HOURS OF DURATION		REASON FOR DEVIATION FROM SCHEDULED MAINTENANCE	
		FROM TO		FROM	TO	Scheduled	Actual*	OR REASON FOR FORCED OUTAGE AS APPROPRIATE	
	П	1	1						
In-service May 1981	Q	8/31/2018 21:30	9/1/2018 19:35	8/31/2018 21:30	9/1/2018 19:35	22:05	22:05	Boiler superheat tube leak repair	
III-service may 1301	J	0/31/2010 21:30	9/1/2010 19:55	0/31/2010 21.30	9/1/2010 19:55	22.03	22.03	Boiler Superileat tube leak repair	
	s	9/11/2018 20:53	9/12/2018 13:32	9/11/2018 20:53	9/12/2018 13:32	16:39	16:39	Boiler superheat tube leak repair	
				-//					
	S	9/22/2018 0:00	11/19/2018 0:00	9/21/2018 23:05	11/19/2018 0:00	1392:00	1392:55	Turbine major overhaul	
Ghent Unit 4 - Coal - 478 MW	s	4/7/2018 0:00	5/7/2018 0:00	5/1/2018 0:00	5/2/2018 10:59	720:00	34:59	Boiler feed pump turbines overhaul	
one i con ii con	Ĭ	1/1/2010 0:00	0/1/2010 0:00	3/1/2010 0.00	0/2/2010 10:00	720.00	01.00	Solid Toda paring tarbindo o tomadi.	
In-service August 1984	F			6/13/2018 13:18	6/14/2018 20:21		31:03	Condensate supply line to boiler feed pump seal injection leak repair	
		0/00/0040 40 00	0/04/0040 40 00	0/00/0040 40 00	0/04/0040 40 00	10.10	40.40		
	S	6/22/2018 19:20	6/24/2018 12:00	6/22/2018 19:20	6/24/2018 12:00	40:40	40:40	Replace condensate line to feedwater heater stop/check valve	
	s	6/24/2018 12:00	6/24/2018 21:53	6/24/2018 12:00	6/24/2018 21:53	9:53	9:53	Replace condensate line to feedwater heater stop/check valve (extension)	
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	
In				5/40/0040 0:40	5/40/0040 0:05		0.40	Con Indiana Contant France	
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 LG&E	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	
	_			E/27/2019 17:20	E/20/2019 10:16		16:47	Forced Droft Fan Banair	
	F			5/27/2018 17:29	5/28/2018 10:16		10.47	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	Q	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	
Carle Kull Olik 7 - Gas GG - GGS MW	J	10/11/2010 22.00	10/13/2010 0:00	10/11/2010 22.00	10/13/2010 0.00	25.52	25.52	Orank test advillary power dieser 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 LG&E	+								
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	
	Ť	3/3/	5, 5, = 5, 5		3,3,2				
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 LG&E	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 0:00	9/22/2018 0:00	10/1/2018 0:01	216:00	216:01	Generator and controls repairs	
		40/4/0040 0 04	10/4/0010 11 50	40/4/0040 0 04	10/1/2010 11 50	44.40	44.40		
	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	
	Ħ							<u> </u>	
	F			10/23/2018 9:22	10/24/2018 17:04		31:42	Rotor barring pump motor replaced	
E W Provincial Constant		5/7/0040	F/7/0010 1:	E/7/0040	E/7/0010 1 :	0.55			
E. W. Brown Unit 6 - Gas CT - 171 MW	5	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	

Unit and Outage Type		Sahaa	luled I	Act	ual*	HOLIDS OF	DURATION	REASON FOR DEVIATION FROM SCHEDULED MAINTENANCE
(F=Forced; S=Scheduled)		Scheduled TO		FROM TO				OR REASON FOR FORCED OUTAGE AS APPROPRIATE
,	_				· -			1
	П							
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
	П							
Jointly owned with LG&E	Ш							
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 LG&E	${\color{blue}+}$							
E. W. Brown Unit 8 - Gas CT - 128 MW	S	6/22/2018 6:22	6/22/2018 12:54	6/22/2018 6:22	6/22/2018 12:54	6:32	6:32	Gas flow meter orifice inspection
In-service February 1995	0	10/11/2018 6:21	10/11/2018 12:34	10/11/2018 6:21	10/11/2018 12:34	6:13	6.12	Gas control valve inspection
iii-service replualy 1993	+	10/11/2016 0.21	10/11/2016 12.34	10/11/2016 0.21	10/11/2010 12.34	0.13	0.13	Gas control valve inspection
E. W. Brown Unit 9 - Gas CT - 138 MW	9	5/9/2018 5:55	5/25/2018 14:04	5/9/2018 5:55	5/25/2018 14:04	392:09	303-00	Row 2 turbine vane replacement
L. 11. DIOWII GIAL 3 - Gas C1 - 130 MINA	1	3/3/2010 3.33	3/23/2010 14.04	3/3/2010 5.55	3/23/2010 14.04	392.09	392.09	ntow 2 turbine varie replacement
In-service January 1995								
	Ħ							
E. W. Brown Unit 10 - Gas CT - 138 MW	11	No outages > or = 6 hours						
	Ħ	3						
In-service December 1995								
	П							
E. W. Brown Unit 11 - Gas CT - 128 MW	S	9/29/2018 0:00	11/26/2018 0:00	9/28/2018 5:15	11/25/2018 0:00	1392:00	1386:45	Turbine overhaul
In-service May 1996	Щ							
Haefling Unit 1 - Gas CT - 14 MW	S	6/11/2018 1:00	6/15/2018 13:58	6/11/2018 1:00	6/15/2018 13:58	108:58	108:58	Replace switchyard 69KV power transforner
In-service October 1970	4							
Haefling Unit 2 - Gas CT - 14 MW	S	6/11/2018 1:00	6/15/2018 13:58	6/11/2018 1:00	6/15/2018 13:58	108:58	108:58	Replace switchyard 69KV power transforner
la camina Octobra 4070								
In-service October 1970	++							
D. I. D. II. 7.40 O. OT 475 MW		0/04/0040 5 45	0/04/0040 0 00	0/04/0040 5 45	0/04/0040 0 00	00.45	00.45	
Paddys Run Unit 13 - Gas CT - 175 MW	+5	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	9	9/24/2018 0:00	9/24/2018 19:00	9/24/2018 0:00	9/24/2018 19:00	19:00	10.00	Generator Inspection
III-361 VICE JUIIE 2001	#	3/24/2010 0:00	5/24/2010 19:00	3/24/2010 0:00	5/24/2010 19:00	19.00	19.00	Generator inspection
Jointly owned with LG&E	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
•	Ħ	5.5.25.5 5.00				2:2:00		
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
· · · · · · · · · · · · · · · · · · ·	П							
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
	П							
Jointly owned with LG&E	Ш							
	П							
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	44							
Jointly owned with LG&E	11]	

Unit and Outage Type	Sche	duled	Actual*		HOURS OF DURATION		REASON FOR DEVIATION FROM SCHEDULED MAINTENANCE	
(F=Forced; S=Scheduled)	FROM	TO	FROM	TO	Scheduled	Actual*	OR REASON FOR FORCED OUTAGE AS APPROPRIATE	
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	
n-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	
ointly owned with LG&E	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	
n-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	
lointly owned with LG&E								
rimble 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	
n-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	
	_							
ointly owned with LG&E	<u> </u>		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	
	3 10/20/2018 7.00	10/20/2016 15.00	10/20/2016 7.00	10/20/2016 15.00	8.00	6.00	Giantup Gysteini	
rimble 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	224:17	Circuit Breaker - Repair	
Tillible County Offic To - Gas C1 - 179 MW	4/28/2018 0.00	3/14/2016 0.00	3/19/2016 0.00	0/1/2010 12.17	364.00	324.17	Olicuit Breaker - Nepali	
n-service July 2004	[_		9/7/2018 21:47	9/8/2018 20:45		22:58	Fuel Gas System	
-361 VIGE Guly 2004	<u> </u>		3/1/2010 21.4/	3/0/2010 20.45		22.50	i uei Gas Gystein	
ointly owned with LG&E	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	
Ullily Owned with LGAE	10/20/2016 7.00	10/20/2016 15:00	10/20/2016 7.00	10/20/2016 15.00	6.00	8.00	Joianup System	

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

Case No. 2019-00004

Question No. 16

Responding Witness: Stuart 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.

Attachment to Response to Question No. 16 Page 1 of 1 Wilson

Kentucky Utilities Unit Capacity Factors by Month

Unit	Capacity Factor (%) (Net MWh)/(period hrs x MW rating)								
Ollit	May 2018	May 2018 Jun 2018 Jul 2018 Aug 2018 Sep 2018 Oc							
Brown 1	24.5	42.5	25.2	0.0	0.0	31.0			
Brown 2	35.3	43.2	32.0	0.0	0.0	53.9			
Brown 3	37.0	43.9	31.1	33.0	52.5	44.6			
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 8	2.0	6.3	8.2	0.8	5.7	2.0			
Brown 9	1.4	2.0	0.0	0.6	2.3	6.6			
Brown 10	5.5	3.5	2.5	0.9	3.9	4.8			
Brown 11	0.6	0.1	1.6	5.8	4.4	0.0			
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			
Dix 1	28.2	37.3	52.3	17.3	32.8	59.9			
Dix 2	36.7	39.7	52.3	17.0	31.8	58.8			
Dix 3	28.2	30.4	52.3	17.0	37.1	52.3			
Ghent 1	82.0	81.6	75.7	76.0	71.3	80.1			
Ghent 2	81.3	83.4	81.3	82.3	64.5	92.2			
Ghent 3	71.3	70.7	67.0	65.7	42.5	0.0			
Ghent 4	69.1	64.4	67.5	71.1	64.5	70.2			
Haefling 1-2	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 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			

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.

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

Case No. 2019-00004

Question No. 17

Responding Witness: Michael P. Drake

Q-17.

- a. For the last six months of the period under review, explain if KU made any changes to its maintenance and operation practices, or completed any specific generation efficiency improvements that affect fuel usage at KU's generation facilities.
- b. Describe the impact of these changes on KU'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. KU 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. KU 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, KU must balance any potential efficiency benefit associated with the project against both costs and potential implications under the Clean Air Act. KU has not realized any efficiency improvements through major component projects during this period.

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

Case No. 2019-00004

Question No. 18

Responding Witness: Delbert Billiter / Charles R. Schram

- Q-18. State whether KU 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. KU is not aware of any violations of its policies and procedures regarding fuel procurement that occurred prior to or during the period under review.

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

Case No. 2019-00004

Question No. 19

Responding Witness: Derek A. Rahn

- Q-19. State whether KU 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. KU is not aware of any violations of 807 KAR 5:056 that occurred prior to or during the period under review.

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

Case No. 2019-00004

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.

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

Case No. 2019-00004

Question No. 21

Responding Witness: Delbert Billiter

- Q-21. For each generating station, state the methods of coal delivery currently available.
- A-21.
- a. E.W. Brown Rail and Truck
- b. Ghent Barge
- c. Trimble County Barge

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

Case No. 2019-00004

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) KU believes the current base period fuel cost should remain unchanged.
- A-22. After reviewing actual FAC costs for the base period November 2016 through October 2018, Kentucky Utilities ("KU") recommends that the per unit fuel cost for the December 2017 expense month be used as the base period. The attached table shows that the per unit fuel cost for December 2017 was \$0.02452/kWh. KU estimates that the average per unit fuel cost for the calendar year 2019 will be \$0.02483/kWh and the average per unit fuel cost for the calendar year 2020 will be \$0.02415/kWh. The per unit fuel cost for December 2017 of \$0.02452/kWh approximates the weighted average of the projected fuel estimates for the two-year period of \$0.02449/kWh.

Since no actual per unit fuel cost during the two-year period under review equals the projected per unit fuel cost, KU recommends the use of the actual per unit fuel cost for December 2017 because this is the actual cost from the two-year expense period closest to the weighted average projected cost for the next two-year period. This methodology is consistent with what has been used and accepted in previous two year cases, and therefore KU believes December 2017 is the appropriate month to use as the base FAC for the next two-year period.

KU determined the projected F(m) / S(m) results using:

- projected coal, oil, and natural gas expenses,
- projected purchased power expenses, off-system sales revenues and;
- all associated generated, purchased and sold kilowatt-hours for the period.

Kentucky Utilities

Retail Fuel Adjustment Clause Fuel Cost per kWh For the Expense Months Ending October 31, 2018

	Actual*											
	(a)	(b)		(c)		(d)		(e)	(1	f)		(g)
Line No.	Expense Month	Billing Month		Fuel Expense	k	xWh Sales	I	Expense Month (\$/kWh) (Col. c / d)	FAC Base	(\$/kWh)	Bil	ling Month FAC Factor (Col. e - f)
(1)	Nov-16	Jan-17	\$	34,397,636		1,526,796,293	\$	0.02253	\$	0.02892	\$	(0.00639)
(2)	Dec-16	Feb-17	\$	47,558,109		1,873,070,228	\$	0.02539	\$	0.02892	\$	(0.00353)
(3)	Jan-17	Mar-17	\$	50,229,763		1,856,586,183	\$	0.02705	\$	0.02892	\$	(0.00187)
(4)	Feb-17	Apr-17	\$	37,997,253		1,540,565,205	\$	0.02466	\$	0.02892	\$	(0.00426)
(5)	Mar-17	May-17	\$	40,975,690		1,666,297,455	\$	0.02459	\$	0.02892	\$	(0.00433)
(6)	Apr-17	Jun-17	\$	35,041,538		1,457,734,261	\$	0.02404	\$	0.02892	\$	(0.00488)
(7)	May-17	Jul-17	\$	37,645,425		1,572,701,693	\$	0.02394	\$	0.02892	\$	(0.00498)
(8)	Jun-17	Aug-17	\$	42,899,493		1,686,418,489	\$	0.02544	\$	0.02892	\$	(0.00348)
(9)	Jul-17	Sep-17	\$	47,664,991		1,882,125,531	\$	0.02533	\$	0.02892	\$	(0.00359)
(10)	Aug-17	Oct-17	\$	43,372,602		1,793,845,441	\$	0.02418	\$	0.02892	\$	(0.00474)
(11)	Sep-17	Nov-17	\$	35,692,457		1,544,368,584	\$	0.02311	\$	0.02609	\$	(0.00298)
(12)	Oct-17	Dec-17	\$	36,353,130		1,533,048,728	\$	0.02371	\$	0.02609	\$	(0.00238)
(13)	Nov-17	Jan-18	\$	39,377,582		1,578,386,440	\$	0.02495	\$	0.02609	\$	(0.00114)
(14)	Dec-17	Feb-18	\$	46,627,544		1,901,836,603	\$	0.02452	\$	0.02609	\$	(0.00157)
(15)	Jan-18	Mar-18	\$	61,980,571		2,195,308,259	\$	0.02823	\$	0.02609	\$	0.00214
(16)	Feb-18	Apr-18	\$	39,396,797		1,597,504,892	\$	0.02466	\$	0.02609	\$	(0.00143)
(17)	Mar-18	May-18	\$	43,703,499		1,726,641,195	\$	0.02531	\$	0.02609	\$	(0.00078)
(18)	Apr-18	Jun-18	\$	36,437,981		1,499,065,877	\$	0.02431	\$	0.02609	\$	(0.00178)
(19)	May-18	Jul-18	\$	40,722,056		1,694,329,607	\$	0.02403	\$	0.02609	\$	(0.00206)
(20)	Jun-18	Aug-18	\$	43,133,911		1,783,740,697	\$	0.02418	\$	0.02609	\$	(0.00191)
(21)	Jul-18	Sep-18	\$	43,061,146		1,860,306,506	\$	0.02315	\$	0.02609	\$	(0.00294)
(22)	Aug-18	Oct-18	\$	43,863,341		1,872,745,774	\$	0.02342	\$	0.02609	\$	(0.00267)
(23)	Sep-18	Nov-18	\$	38,700,885		1,673,722,834	\$	0.02312	\$	0.02609	\$	(0.00297)
(24)	Oct-18	Dec-18	\$	35,271,348		1,594,481,568	\$	0.02212	\$	0.02609	\$	(0.00397)
(25)	Overall Average		\$	41,754,365		1,704,651,181	\$	0.02449	\$	0.02609	\$	(0.00160)
(26)	Average for the Last Twelve Months		\$	42,689,722	\$	1,748,172,521	\$	0.02442	\$	0.02609	\$	(0.00167)

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

Kentucky Utilities

Forecasted Retail Fuel Adjustment Clause Fuel Cost per kWh 2019 and 2020

Forecast											
	(a)	(b)		(c)	(d)	(e)					
Line No.	Expense Month	Billing Month	Fe	orecasted Fuel Expense	Forecasted kWh Sales	Forecasted Expense Month (\$/kWh) (Col. c / d)					
(1)	Jan-19	Mar-19	\$	52,664,646	2,085,839,305	\$ 0.02525					
(2)	Feb-19	Apr-19	\$	42,065,836	1,679,937,157	\$ 0.02504					
(3)	Mar-19	May-19	\$	41,457,979	1,602,266,225	\$ 0.02587					
(4)	Apr-19	Jun-19	\$	35,325,466	1,412,817,083	\$ 0.02500					
(5)	May-19	Jul-19	\$	36,274,471	1,521,765,471	\$ 0.02384					
(6)	Jun-19	Aug-19	\$	37,715,967	1,562,063,235	\$ 0.02414					
(7)	Jul-19	Sep-19	\$	41,606,624	1,691,977,086	\$ 0.02459					
(8)	Aug-19	Oct-19	\$	42,544,350	1,726,075,846	\$ 0.02465					
(9)	Sep-19	Nov-19	\$	34,951,548	1,418,141,057	\$ 0.02465					
(10)	Oct-19	Dec-19	\$	34,201,229	1,348,838,830	\$ 0.02536					
(11)	Nov-19	Jan-20	\$	37,074,258	1,516,409,846	\$ 0.02445					
(12)	Dec-19	Feb-20	\$	42,368,771	1,698,725,865	\$ 0.02494					
(13)	Jan-20	Mar-20	\$	48,935,854	1,954,666,237	\$ 0.02504					
(14)	Feb-20	Apr-20	\$	38,849,205	1,565,428,486	\$ 0.02482					
(15)	Mar-20	May-20	\$	38,241,983	1,510,694,989	\$ 0.02531					
(16)	Apr-20	Jun-20	\$	31,082,757	1,310,148,642	\$ 0.02372					
(17)	May-20	Jul-20	\$	35,412,230	1,520,432,923	\$ 0.02329					
(18)	Jun-20	Aug-20	\$	36,876,702	1,560,557,785	\$ 0.02363					
(19)	Jul-20	Sep-20	\$	40,308,013	1,689,982,646	\$ 0.02385					
(20)	Aug-20	Oct-20	\$	41,364,273	1,724,828,625	\$ 0.02398					
(21)	Sep-20	Nov-20	\$	33,721,503	1,416,922,724	\$ 0.02380					
(22)	Oct-20	Dec-20	\$	32,063,518	1,346,496,021	\$ 0.02381					
(23)	Nov-20	Jan-21	\$	35,814,909	1,513,509,867	\$ 0.02366					
(24)	Dec-20	Feb-21	\$	41,557,302	1,693,001,009	\$ 0.02455					
(25)	Overall Average			38,853,308	1,586,313,623	\$ 0.02449					
(26)	2019 Average		\$	39,854,262	\$ 1,605,404,750	\$ 0.02483					
(27)	2020 Average	_	\$	37,852,354	\$ 1,567,222,496	\$ 0.02415					

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

Case No. 2019-00004

Question No. 23

Responding Witness: Derek A. Rahn

- Q-23. Provide a calculation of the fossil fuel costs F(b) that KU 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 KU.
- A-23. Attached is a copy of the Fuel Cost Schedule (Form A, Page 2) for the expense period of December 2017, which shows the component of the proposed F(b) as defined by 807 KAR 5:056.

As explained in the response to Question No. 22, KU reviewed the per-unit fuel cost for each month during the November 2016 through October 2018 expense period and compared those values to the projected average per unit fuel cost for the next two-year period. As a result, F(b) and S(b) were considered together in determining the appropriate month to use as a new base fuel component.

KENTUCKY UTILITIES COMPANY FUEL COST SCHEDULE

Expense Month: December 2017

(A) Company Generation Coal Burned Oil Burned Gas Burned Fuel (assigned cost during Forced Outage) Fuel (substitute cost for Forced Outage) SUB-TOTAL	(+) (+) (+) (+) (-) _	\$28,747,630 236,379 11,968,834 1,916,434 1,979,312 \$ 40,889,965	(1) (1) (1)
(B) Purchases Net energy cost - economy purchases Identifiable fuel cost - other purchases Identifiable fuel cost (substitute for Forced Outage) Less Purchases above Highest Cost Units Internal Economy Internal Replacement SUB-TOTAL	(+) (+) (-) (-) (+) (+)	\$ 609,071 - 3,243 - 5,094,328 20 \$ 5,700,176	N B
(C) Inter-System Sales Including Interchange-out Internal Economy Internal Replacement Dollars Assigned to Inter-System Sales Losses SUB-TOTAL	(+) (+) (+) (+) -	\$ 8,045 26,997 291,466 40 \$ 326,548	
(D) Over or (Under) Recovery From Page 5, Line 13 TOTAL FUEL RECOVERY (A+B-C-D) =	-	\$ (363,951) \$ 46,627,544	

Note: (1) Reflects exclusion of IMEA/IMPA portion of Trimble County Unit 2 fuel cost with recognition of 0.5% transmission losses per Commission's Order in Case No. 2012-00552.

al burned =	\$7,102
Oil burned =	\$0
as burned =	\$235

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

Case No. 2019-00004

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 KU believes that the sales in the selected base period (b) are representative of the level of kWh sales that KU 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.

a-b. Attached is a copy of the Sales Schedule (Form A, Page 3) for the base period of December 2017, which shows the component of the proposed S(b) as defined by 807 KAR 5:056.

As explained in the response to Question No. 22, KU reviewed the per-unit fuel cost for each month during the November 2016 through October 2018 base period and compared those values to the projected average per unit fuel cost for the next two-year period. As a result, F(b) and S(b) were considered together in determining the appropriate month to use as a new base fuel component.

Form A Page 3 of 6

KENTUCKY UTILITIES COMPANY

SALES SCHEDULE (KWH)

Expense Month: December 2017

(A)	Generation (Net) Purchases including interchange-in Internal Economy Internal Replacement SUB-TOTAL	(+) (+) (+)	1,731,188,000 65,151,000 235,488,000 1,000 2,031,828,000
(B)	Inter-system Sales including interchange-out Internal Economy Internal Replacement (*) System Losses	(+) (+) (+) (+)	390,000 1,353,000 11,031,000 117,217,397
	SUB-TOTAL TOTAL SALES (A-B)	-	1,901,836,603

(*) Note: See Page 4 of 6, "Adjustment of rolling 12-MTD average overall system losses to reflect losses at retail level"

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

Case No. 2019-00004

Question No. 25

Responding Witness: Derek A. Rahn

Q-25. Provide a schedule showing the calculation of KU's proposed increase or decrease in its base fuel cost per kWh to be incorporated into its base rate.

A-25.

Current Base \$0.02609/kWh

Proposed Base \$0.02452/kWh

Decrease in Base Rates \$0.00157/kWh

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

Case No. 2019-00004

Question No. 26

Responding Witness: Derek A. Rahn

- Q-26. Provide a schedule of the present and proposed rates that KU seeks to change pursuant to 807 KAR 5:056, shown in comparative form.
- A-26. See attached present and proposed rates that KU seeks approval effective with service rendered with the final Order. Present and proposed rates are subject to change with the pending Application of KU for an adjustment of its Electric Rates (Case No. 2018-00294).

Proposed rate changes to Tariff Sheet Nos. 79 (School Power Service) and 80 (School Time of Day Service) are being provided for illustrative purposes only. While both tariffs expired on September 28, 2018, with the filing of KU's application to adjust electric rates (Case No. 2018-00294), both are still reflected in the Company's current Commission approved tariffs.

Tariff Sheet	Tariff	Rate					urrent Base te Excluding Fuel		oposed Base Fuel Rate		roposed Base ate Including Fuel	% Decrease in Base Rate	
(1)	(2)		(3)		(4)		(5)		(6)		(7)	(8)	
							(3) - (4)				(5) + (6)	((7) - (3)) / (3)	
5	RS	\$	0.09047	\$	0.02609	\$	0.06438	\$	0.02452	\$	0.08890	-1.74%	
6	RTOD-Energy												
	On Peak	\$	0.27615	\$	0.02609	\$	0.25006	\$	0.02452	\$	0.27458	-0.57%	
	Off Peak	\$	0.05892	\$	0.02609	\$	0.03283	\$	0.02452	\$	0.05735	-2.66%	
7	RTOD - Demand	\$	0.04478	\$	0.02609	\$	0.01869	\$	0.02452	\$	0.04321	-3.51%	
9	VFD	\$	0.09047	\$	0.02609	\$	0.06438	\$	0.02452	\$	0.08890	-1.74%	
10	GS	\$	0.10490	\$	0.02609	\$	0.07881	\$	0.02452	\$	0.10333	-1.50%	
12	AES	\$	0.08244	\$	0.02609	\$	0.05635	\$	0.02452	\$	0.08087	-1.90%	
15	PS												
15	Secondary	\$	0.03270	\$	0.02609	\$	0.00661	\$	0.02452	\$	0.03113	-4.80%	
	Primary	\$	0.03171	\$	0.02609	\$	0.00562	\$	0.02452	\$	0.03014	-4.95%	
		_	*******	-	****	-	******	-	****	_			
20	TODS	\$	0.03229	\$	0.02609	\$	0.00620	\$	0.02452	\$	0.03072	-4.86%	
22	TODP	\$	0.03136	\$	0.02609	\$	0.00527	\$	0.02452	\$	0.02979	-5.01%	
25	RTS	\$	0.03058	\$	0.02609	\$	0.00449	\$	0.02452	\$	0.02901	-5.13%	
30	FLS												
	Primary	\$	0.03136	\$	0.02609	\$	0.00527	\$	0.02452	\$	0.02979	-5.01%	
	Transmission	\$	0.03036	\$	0.02609	\$	0.00427	\$	0.02452	\$	0.02879	-5.17%	
37	LE	\$	0.07264	\$	0.02609	\$	0.04655	\$	0.02452	\$	0.07107	-2.16%	
38	TE	\$	0.08955	\$	0.02609	\$	0.06346	\$	0.02452	\$	0.08798	-1.75%	
79	SPS	\$	0.03289	\$	0.02609	\$	0.00680	\$	0.02452	\$	0.03132	-4.77%	
80	STOD	\$	0.03244	\$	0.02609	\$	0.00635	\$	0.02452	\$	0.03087	-4.84%	
81	OSL												
	Secondary	\$	0.03288	\$	0.02609	\$	0.00679	\$	0.02452	\$	0.03131	-4.77%	
	Primary	\$	0.03189	\$	0.02609	\$	0.00580	\$	0.02452	\$	0.03032	-4.92%	

Proposed changes to Tariff Sheet Nos. 79 (School Power Service) and 80 (School Time of Day Service) are being provided for illustrative purposes only. While both tariffs expired on September 28, 2018 with the filing of KU's application to adjust electric rates (Case No. 2018-00294), both are still reflected in the Company's current Commission approved tariffs.

												Monthly Charge											
Tariff Sheet	Tariff	Service Type	Bulb Type	Rate Code	Fixture Type	Approximate Lumens	kW Per Light	kWh per Year*	Fuel Factor Decrease \$/kWh**	Annual Decrease	Monthly Decrease	Existing Fixture Only Monthly Charge	Proposed Fixture Only Monthly Charge	% Decrease	Existing Ornamental Monthly Charge	Proposed Ornamental Monthly Charge	% Decrease	Existing Decorative Smooth Monthly Charge	Proposed Decorative Smooth Monthly Charge	% Decrease	Existing Historic Fluted Monthly Charge	Proposed Historic Fluted Monthly Charge	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
35	IS (Overhead						(8) * 4,000	\$ (0.00157)	(9) * (10)	(11)/12 mos.		(12) +(13)	(12)/(13)		(12) +(16)	(12)/(16)		(12) +(19)	(12)/(19)		(12) +(22)	(12)/(22)
55		o remenu	High Pressure Sodium																				
				462	Cobra Head	5,800	\$ 0.083	332	\$ (0.00157)	\$ (0.52)	\$ (0.04)	\$ 10.10	\$ 10.06	-0.43%	\$ 13.77	\$ 13.73	-0.32%						
					Cobra Head	5,800	\$ 0.083	332			\$ (0.04)		\$ 10.06	-0.43%	\$ 13.77								
					Cobra Head		\$ 0.117	468						-0.58%	\$ 14.36 \$ 14.36								
					Cobra Head Cobra Head	9,500 22,000	\$ 0.117 \$ 0.242	468 968	\$ (0.00157) \$ (0.00157)					-0.58% -0.78%	\$ 14.36 \$ 20.43								
					Cobra Head		\$ 0.242	968	\$ (0.00157)					-0.78%	\$ 20.43								
				465	Cobra Head	50,000	\$ 0.471	1,884				\$ 25.75		-0.96%	\$ 28.53	\$ 28.28	-0.86%						
					Cobra Head	50,000	\$ 0.471	1,884	\$ (0.00157)	\$ (2.96)	\$ (0.25)	\$ 25.75	\$ 25.50	-0.96%	\$ 28.53	\$ 28.28	-0.86%						ļ
					Directional	9,500		468						-0.59%									
					Directional	22,000	\$ 0.242		\$ (0.00157)					-0.81%									ļ
					Directional Open Bottom	9,500	\$ 0.471 \$ 0.117	1,884 468						-1.12% -0.68%									
			Metal Halide	420	Open Bottom	2,500	3 0.117	400	\$ (0.00157)	a (0.75)	3 (0.00)	3 7.01	9 0.75	-0.0070									
				451	Directional	32,000	\$ 0.350	1,400	\$ (0.00157)	\$ (2.20)	\$ (0.18)	\$ 23.07	\$ 22.89	-0.79%									
			Light Emitting Diode (LED)																				ļ
					Cobra Head		\$ 0.080	320						-0.26%									
					Cobra Head Cobra Head	14,166	\$ 0.134	536 912			\$ (0.07)		\$ 18.53 \$ 27.83	-0.38% -0.43%									ļ
35.1	LS				Open Bottom	5,007	\$ 0.228 \$ 0.050	200						-0.24%									ļ
		Underground				-,			(0.0010.)	. ()	- ()												
			High Pressure Sodium																				
					Colonial	5,800	\$ 0.083	332										\$ 12.84					
					Colonial Acorn	9,500 5,800	\$ 0.117 \$ 0.083	468 332										\$ 13.07 \$ 17.43		-0.47% -0.25%	s 24.76	\$ 24.72	-0.18%
					Acom	5,800	\$ 0.083	332										\$ 17.43		-0.25%	\$ 24.76		
					Acom	9,500	\$ 0.117	468										\$ 17.79		-0.34%			
					Acom		\$ 0.117	468	\$ (0.00157)	\$ (0.73)	\$ (0.06)							\$ 17.79	\$ 17.73	-0.34%	\$ 25.25		
					Victorian	5,800	\$ 0.083	332													\$ 34.32		
					Victorian Contemporary	9,500	\$ 0.117 \$ 0.083	468 332				s 17.36	s 17.32	-0.25%				\$ 19.60	s 19.56	-0.22%	\$ 34.53	\$ 34.47	-0.18%
					Contemporary	5,800	\$ 0.083	332						-0.25%				\$ 19.60 \$ 19.60					
					Contemporary	9,500	\$ 0.117	468						-0.36%				S 24.09		-0.25%			ļ
					Contemporary		\$ 0.117	468	\$ (0.00157)					-0.36%				\$ 24.09		-0.25%			
					Contemporary	22,000	\$ 0.242		\$ (0.00157)					-0.63%				\$ 31.05		-0.41%			
					Contemporary	22,000			\$ (0.00157)				\$ 19.91	-0.63%	1			\$ 31.05		-0.41%			
					Contemporary Contemporary	50,000	\$ 0.471 \$ 0.471	1,884 1,884			\$ (0.25) \$ (0.25)			-1.01% -1.01%	1			\$ 38.26 \$ 38.26		-0.64% -0.64%			
					Dark Sky	4,000	\$ 0.471	240			\$ (0.23)	9 24.29	9 24.04	-1.01%	1			\$ 25.05		-0.04%			
					Dark Sky	9,500	\$ 0.117	468										\$ 26.13		-0.23%			
			Metal Halide		•										1								
35.2	LS				Contemporary	32,000	\$ 0.350	1,400							1			\$ 39.14					
			Light Emitting Diode (LED)	495	Contemporary	32,000	\$ 0.350	1,400	\$ (0.00157)	\$ (2.20)	\$ (0.18)	\$ 24.95	\$ 24.77	-0.73%	1			\$ 39.14	\$ 38.96	-0.47%			
			Light Emitting Diode (LED)	396	Cobra Head	8.179	\$ 0.080	320	\$ (0.00157)	\$ (0.50)	\$ (0.04)				1			\$ 36.40	\$ 36.36	-0.12%			
					Cobra Head		\$ 0.134	536							1			\$ 39.12		-0.12%			
					Cobra Head		\$ 0.228		\$ (0.00157)						1			\$ 48.46		-0.25%			
				399	Colonial, 4-Sided	5,665	\$ 0.068	272	\$ (0.00157)	\$ (0.43)	\$ (0.04)							\$ 38.22	\$ 38.18	-0.09%			

 $^{* \ \} Per \ KU's \ Tariff \ \ Sheet \ No. \ 67, kWh \ consumed \ by \ lighting \ units \ are \ based \ on \ 4,000 \ hours \ of \ use \ per \ year.$

**	Current	Fuel Base		Proposed Fuel Base		Difference
	\$	0.02609	S	0.02452	\$	(0.00157)

												Monthly Charge													
Tariff Sheet	ariff	Service Type	Bulb Type	Rate Code	Fixture Type	Approximate Lumens	kW Per Light	kWh per Year*	Fuel Factor Decrease \$/kWh**	Annual Decrease	Monthly Decrease	Existing Only Mo	onthly	Proposed Fixture On Monthly Charge	ly % Decre		Existing Fixture & Pole Monthly Charge	Proposed Fixture & Pole Monthly Charg	% Decrease	Existing Decorative Smooth Monthly Charge	Proposed Decorative Smooth Monthly Charge	% Decrease	Existing Historic Fluted Monthly Charge	Proposed Historic Flute Monthly Char	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15		(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
36	DIC C	Overhead						(8) * 4,000	\$ (0.00157)	(9) * (10)	(11) / 12 mo.			(12) +(13)	(12)/	(13)		(12) +(16)	(12)/(16)		(12) +(19)	(12)/(19)		(12) +(22)	(12)/(22)
30	KL3 C	Overnead	High Pressure Sodium																						
			riigii r ressure toduum	461	Cobra Head	4.000	\$ 0.060	240	\$ (0.00157)	\$ (0.38)	\$ (0.0	3) \$	9.03	\$ 9.0	00 -0.35	596	\$ 12.35	\$ 12.32	-0.25%						
					Cobra Head	4,000	\$ 0.060		\$ (0.00157)			3) \$		\$ 9.0			\$ 12.35								
					Cobra Head		\$ 0.471	1.884					14.21												
					Open Bottom		\$ 0.083	332				4) \$	8.78												
			Metal Halide		- F	-,			(0.0010.)	. (0.0-2)	, , (010	7													
				450	Directional	12.000	\$ 0.150	600	\$ (0.00157)	\$ (0.94)	\$ (0.0	8) \$	16.47	\$ 16.3	39 -0.48	396	\$ 21.23	\$ 21.15	-0.37%						
					Directional	12,000	\$ 0.150		\$ (0.00157)			8) \$		\$ 16.3			\$ 21.23								
					Directional		\$ 0.350		\$ (0.00157)							.,.	\$ 27.83								
				452	Directional	107,800	\$ 1.080		\$ (0.00157)				48.09	\$ 47.5	52 -1.18	396	\$ 52.84								
					Directional	107,800			\$ (0.00157)					\$ 47.5			\$ 52.84								
			Mercury Vapor			,		,	. (1													
			, .	446	Directional	7,000	\$ 0.207	828	\$ (0.00157)	\$ (1.30)	\$ (0.1	D S	10.93	\$ 10.8	32 -0.99	9%	\$ 13.43	\$ 13.32	-0.81%						
					Directional	7,000	\$ 0.207	828					10.93			9%	\$ 13,43								
				447	Directional	10,000	\$ 0.294	1.176	\$ (0.00157)	\$ (1.85)		5) \$	12.90	\$ 12.7	75 -1.19	9%	\$ 15.12								
				457	Directional	10,000	\$ 0.294	1.176	\$ (0.00157)				12.90			9%	\$ 15.12								
				448	Directional	20,000	\$ 0.453	1.812	\$ (0.00157)	\$ (2.84)			14.56	\$ 14.3	32 -1.63	3%	\$ 17.04								
				458	Directional	20,000	\$ 0.453	1.812				4) S	14.56	\$ 14.3	32 -1.63	396	\$ 17.04								
				404	Open Bottom	7,000	\$ 0.207	828	\$ (0.00157)			() \$	11.96	\$ 11.8	35 -0.91	196									
36.1	RLS		Incandescent																						
				421	Tear Drop	1,000	\$ 0.102	408	\$ (0.00157)	\$ (0.64)	\$ (0.0	5) \$	3.81	\$ 3.7	6 -1.40)%									
				422	Tear Drop	2,500	\$ 0.201	804	\$ (0.00157)	\$ (1.26)	\$ (0.1	1) \$	5.05	\$ 4.9	94 -2.08	3%									
				424	Tear Drop	4,000	\$ 0.327	1,308	\$ (0.00157)	\$ (2.05)	\$ (0.1	7) S	7.51	\$ 7.3	34 -2.28	3%									
				425	Tear Drop	6,000	\$ 0.447	1,788	\$ (0.00157)	\$ (2.81)	\$ (0.2	3) \$	10.02	\$ 9.7	79 -2.33	3%									
	τ	Inderground			•	-																			
		-	Metal Halide																						
				460	Directional	12,000	\$ 0.150	600	\$ (0.00157)	\$ (0.94)	\$ (0.0)	3)								\$ 31.57	\$ 31.49	-0.25%			
				469	Directional	32,000	\$ 0.350	1,400	\$ (0.00157)	\$ (2.20)	\$ (0.1	3)								\$ 37.27	\$ 37.09	-0.49%			
				470	Directional	107,800	\$ 1.080	4,320	\$ (0.00157)	\$ (6.78)	\$ (0.5	7)								\$ 62.05	\$ 61.48	-0.91%			
				490	Contemporary	12,000	\$ 0.150	600	\$ (0.00157)	\$ (0.94)	\$ (0.0	8) \$	17.79	\$ 17.3	1 -0.44	196				\$ 31.76	\$ 31.68	-0.25%	-l		
				494	Contemporary	12,000	\$ 0.150	600	\$ (0.00157)	\$ (0.94)	\$ (0.0)	8) \$	17.79	\$ 17.3	1 -0.44	1%				\$ 31.76	\$ 31.68	-0.25%	I		
				493	Contemporary	107,800	\$ 1.080	4,320	\$ (0.00157)	\$ (6.78)	\$ (0.5	7) \$	51.71	\$ 51.	4 -1.09	9%				\$ 65.67	\$ 65.10	-0.86%	d .		
l				496	Contemporary	107,800	\$ 1.080	4,320	\$ (0.00157)	\$ (6.78)	\$ (0.5	7) \$	51.71	\$ 51.	4 -1.09	9%				\$ 65.67	\$ 65.10	-0.86%	-l		
			High Pressure Sodium													J									
				440	Acom	4,000	\$ 0.060	240	\$ (0.00157)	\$ (0.38)	\$ (0.0)	3)				J				\$ 15.88		-0.20%			-0.13%
					Acom	4,000	\$ 0.060	240	\$ (0.00157)	\$ (0.38)	\$ (0.0)	3)				J				\$ 15.88	\$ 15.85	-0.20%	\$ 23.33	\$ 23.3	-0.13%
l				466	Colonial	4,000	\$ 0.060	240	\$ (0.00157)	\$ (0.38)	\$ (0.0)	3)								\$ 11.37	\$ 11.34	-0.28%	-I		
				412	Coach	5,800	\$ 0.083	332	\$ (0.00157)	\$ (0.52)	\$ (0.0)	4)				J				\$ 34.31	\$ 34.27	-0.13%	I		
				413	Coach	9,500	\$ 0.117	468	\$ (0.00157)	\$ (0.73)	\$ (0.0)	5)								\$ 34.54		-0.18%	-I		
36.2	RLS			360	Granville	16,000	\$ 0.181	724	\$ (0.00157)	\$ (1.14)	\$ (0.0)	9)								\$ 63.76	\$ 63.67	-0.15%	I		

Per KU's Tariff Sheet No. 67, kWh consumed by lighting units are based on 4,000 hours of use per year.

••	Current Fuel Base	Proposed Fuel Base	Difference
	6 0.02 (00	6 0.02452	6 (0.00157)

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

Case No. 2019-00004

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 attached. Note, current tariffs are subject to change with the pending Application of KU for an adjustment of its Electric Rates (Case No. 2018-00294).

Proposed changes to Tariff Sheet Nos. 79 (School Power Service) and 80 (School Time of Day Service) are being provided for illustrative purposes only. While both tariffs expired on September 28, 2018, with the filing of KU's application to adjust electric rates (Case No. 2018-00294), both are still reflected in the Company's current Commission approved tariffs.

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Kentucky Utilities Company

P.S.C. No. 18, <u>Third-Fourth</u> Revision of Original Sheet No. 5 Canceling P.S.C. No. 18, <u>Second-Third</u> Revision of Original Sheet No. 5

Standard Rate

RS

RESIDENTIAL SERVICE

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

Available for single-phase secondary delivery to single family residential service subject to the terms and conditions on Sheet No. 100 of this Tariff. Three phase service under this rate schedule is restricted to those customers being billed on this rate schedule as of July 1, 2004.

RATE

Basic Service Charge per month: \$12.25

Plus an Energy Charge per kWh: \$ 0.088909047

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ADJUSTMENT CLAUSES

The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

Fuel Adjustment Clause	Sheet No. 85
Off-System Sales Adjustment Clause	Sheet No. 88
Demand Side Management Cost Recovery Mechanism	Sheet No. 86
Tax Cuts and Jobs Act Surcredit	Sheet No. 89
Environmental Cost Recovery Surcharge	Sheet No. 87
Franchise Fee Rider	Sheet No. 90
School Tax	Sheet No. 91
Home Energy Assistance Program	Sheet No. 92

MINIMUM CHARGE

The Basic Service Charge shall be the minimum charge.

DUE DATE OF BILL

Customer's payment will be due within sixteen (16) business days (no less than twenty-two (22) calendar days) from the date of the bill.

LATE PAYMENT CHARGE

If full payment is not received by the due date of the bill, a 3% late payment charge will be assessed on the current month's charges. Beginning October 1, 2010, residential customers who receive a pledge for or notice of low income energy assistance from an authorized agency will not be assessed or required to pay a late payment charge for the bill for which the pledge or notice is received, nor will they be assessed or required to pay a late payment charge in any of the eleven (11) months following receipt of such pledge or notice.

TERMS AND CONDITIONS

Service will be furnished under Company's Terms and Conditions applicable hereto.

DATE OF ISSUE: April 5, 2018 February 25, 2019

DATE EFFECTIVE: April 1, 2018 September 1, 2019

ISSUED BY: /s/ Robert M. Conroy, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No.

2019-00004 dated XXXX

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Kentucky Utilities Company

P.S.C. No. 18, <u>Third-Fourth</u> Revision of Original Sheet No. 6 Canceling P.S.C. No. 18, <u>Second Third</u> Revision of Original Sheet No. 6

Standard Rate

RTOD-Energy

Residential Time-of-Day Energy Service

APPLICABLE

In the territory served.

AVAILABILITY OF SERVICE

RTOD-Energy shall be available as an option to customers otherwise served under rate schedule RS.

- Service under this rate schedule is limited to a maximum of five hundred (500) customers taking service on RTOD-Energy and RTOD-Demand combined that are eligible for Rate RS. Company will accept customers on a first-come-first-served basis.
- 2) This service is also available to customers on rate schedule GS (where the GS service is used in conjunction with an RS service to provide service to a detached garage and energy usage is no more than 300 kWh per month) who demonstrate power delivered to such detached garage is consumed, in part, for the powering of low emission vehicles licensed for operation on public streets or highways. Such vehicles include:
 - a) battery electric vehicles or plug-in hybrid electric vehicles recharged through a charging outlet at Customer's premises,
 - natural gas vehicles refueled through an electric-powered refueling appliance at Customer's premises.
- 3) A customer electing to take service under this rate schedule who subsequently elects to take service under the standard Rate RS may not be allowed to return to this optional rate for 12 months from the date of exiting this rate schedule.

RATE

Basic Service Charge per month: \$12.25

Plus an Energy Charge per kWh:

 Off-Peak Hours:
 \$ 0.057355892

 On-Peak Hours:
 \$ 0.2761527458

ADJUSTMENT CLAUSES

The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

Fuel Adjustment Clause	Sheet No. 85
Off-System Sales Adjustment Clause	Sheet No. 88
Demand Side Management Cost Recovery Mechanism	Sheet No. 86
Tax Cuts and Jobs Act Surcredit	Sheet No. 89
Environmental Cost Recovery Surcharge	Sheet No. 87
Franchise Fee Rider	Sheet No. 90
School Tax	Sheet No. 91
Home Energy Assistance Program	Sheet No. 92

DATE OF ISSUE: February 25, 2019April 5, 2018

DATE EFFECTIVE: September 1, 2019April 1, 2018

ISSUED BY: /s/ Robert M. Conroy, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No.

2019-00004 dated XXXX

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Kentucky Utilities Company

P.S.C. No. 18, <u>Third-Fourth</u> Revision of Original Sheet No. 7 Canceling P.S.C. No. 18, <u>Second-Third</u> Revision of Original Sheet No. 7

Standard Rate

RTOD-Demand

Residential Time-of-Day Demand Service

APPLICABLE

In the territory served.

AVAILABILITY OF SERVICE

RTOD-Demand shall be available as an option to customers otherwise served under rate schedule RS

- Service under this rate schedule is limited to a maximum of five hundred (500) customers taking service on RTOD-Demand and RTOD-Energy combined that are eligible for Rate RS. Company will accept customers on a first-come-first-served basis.
- 2) This service is also available to customers on rate schedule GS (where the GS service is used in conjunction with an RS service to provide service to a detached garage and energy usage is no more than 300 kWh per month) who demonstrate power delivered to such detached garage is consumed, in part, for the powering of low emission vehicles licensed for operation on public streets or highways. Such vehicles include:
 - a) battery electric vehicles or plug-in hybrid electric vehicles recharged through a charging outlet at Customer's premises,
 - natural gas vehicles refueled through an electric-powered refueling appliance at Customer's premises.
- 3) A customer electing to take service under this rate schedule who subsequently elects to take service under the standard Rate RS may not be allowed to return to this optional rate for 12 months from the date of exiting this rate schedule.

RATE

Basic Service Charge per month: \$12.25

Plus an Energy Charge per kWh: \$ 0.0447804321

Plus a Demand Charge per kW:

Base Hours: \$ 3.44 Peak Hours: \$ 7.87

ADJUSTMENT CLAUSES

The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

Fuel Adjustment Clause	Sheet No. 85
Off-System Sales Adjustment Clause	Sheet No. 88
Demand Side Management Cost Recovery Mechanism	Sheet No. 86
Tax Cuts and Jobs Act Surcredit	Sheet No. 89
Environmental Cost Recovery Surcharge	Sheet No. 87
Franchise Fee Rider	Sheet No. 90
School Tax	Sheet No. 91
Home Energy Assistance Program	Sheet No. 92

DATE OF ISSUE: February 25, 2019 April 5, 2018

DATE EFFECTIVE: September 1, 2019 April 1, 2018

ISSUED BY: /s/ Robert M. Conroy, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2019-00004 dated XXXX

P.S.C. No. 18, <u>Third-Fourth</u> Revision of Original Sheet No. 9 Canceling P.S.C. No. 18, <u>Second-Third</u> Revision of Original Sheet No. 9

Standard Rate

VFC

VOLUNTEER FIRE DEPARTMENT SERVICE

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

Available for single-phase delivery, in accordance with the provisions of KRS 278.172, to any volunteer fire department qualifying for aid under KRS 95A.262. Service under this rate schedule is at the option of the customer with the customer determining whether service will be provided under this schedule or any other schedule applicable to this load.

DEFINITION

To be eligible for this rate a volunteer fire department is defined as:

- 1) having at least 12 members and a chief;
- 2) having at least one firefighting apparatus; and
- 3) half the members must be volunteers.

RATE

Basic Service Charge per month: \$12.25

Plus an Energy Charge per kWh: \$ 0.0904708890

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ADJUSTMENT CLAUSES

The bill amount computed at the charges specified above shall be increased or decreased in accordance with:

Fuel Adjustment Clause	Sheet No. 85
Off-System Sales Adjustment Clause	Sheet No. 88
Demand-Side Management Cost Recovery Mechanism	Sheet No. 86
Tax Cuts and Jobs Act Surcredit	Sheet No. 89
Environmental Cost Recovery Surcharge	Sheet No. 87
Franchise Fee Rider	Sheet No. 90
School Tax	Sheet No. 91

MINIMUM CHARGE

The Basic Service Charge shall be the minimum charge.

DUE DATE OF BILL

Customer's payment will be due within sixteen (16) business days (no less than twenty-two (22) calendar days) from the date of the bill.

LATE PAYMENT CHARGE

If full payment is not received by the due date of the bill, a 3% late payment charge will be assessed on the current month's charges.

TERMS AND CONDITIONS

Service will be furnished under Company's Terms and Conditions applicable hereto.

DATE OF ISSUE: February 25, 2019 April 5, 2018

DATE EFFECTIVE: September 1, 2019 April 1, 2018

ISSUED BY: /s/ Robert M. Conroy, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No.

2019-00004 dated XXXX

P.S.C. No. 18, Third-Fourth Revision of Original Sheet No. 10 Canceling P.S.C. No. 18, Second-Third Revision of Original Sheet No. 10

Standard Rate

GS

GENERAL SERVICE RATE

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

To general lighting and small power loads for secondary service.

Service under this schedule will be limited to customers whose 12-month-average monthly maximum loads do not exceed 50 kW. Existing customers with 12-month-average maximum monthly loads exceeding 50 kW who are receiving service under P.S.C. 13, Fourth Revision of Original Sheet No. 10 as of February 6, 2009, will continue to be served under this rate at their option. If Customer is taking service under this rate schedule and subsequently elects to take service under another rate schedule, Customer may not again take service under this rate schedule unless and until Customer meets the Availability requirements that would apply to a new customer.

RATE

Basic Service Charge per month: \$31.50 single-phase service

\$50.40 three-phase service

Plus an Energy Charge per kWh: \$0.1049010333

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ADJUSTMENT CLAUSES

The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

Fuel Adjustment Clause	Sheet No. 85	
Off-System Sales Adjustment Clause	Sheet No. 88	
Demand-Side Management Cost Recovery Mechanism	Sheet No. 86	
Tax Cuts and Jobs Act Surcredit	Sheet No. 89	
Environmental Cost Recovery Surcharge	Sheet No. 87	
Franchise Fee Rider	Sheet No. 90	
School Tax	Sheet No. 91	

DETERMINATION OF LOAD

Service hereunder will be metered except when, by mutual agreement of Company and Customer, an unmetered installation will be more satisfactory from the standpoint of both parties. In the case of unmetered service, billing will be based on a calculated consumption taking into account the types of equipment served.

DATE OF ISSUE: February 25, 2019April 5, 2018

DATE EFFECTIVE: September 1, 2019April 1, 2018

ISSUED BY: /s/ Robert M. Conroy, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2019-00004 dated XXXX

P.S.C. No. 18, Second Third Revision of Original Sheet No. 12 Canceling P.S.C. No. 18, First Second Revision of Original Sheet No. 12

Standard Rate

AES

ALL ELECTRIC SCHOOL

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

Service under this rate is available for secondary and primary service to:

- (1) a complex of school buildings on a central campus;
- (2) an individual school building; or
- (3) an addition to an existing school building.

School buildings, as referred to herein, shall be defined as buildings used as classrooms, laboratories, gymnasiums, libraries, cafeterias, school related offices or for other bona fide school purposes by duly constituted school authorities of Kentucky. Served electrically by Kentucky Utilities Company, such energy requirements include, but are not limited to, lighting, heating, cooling, and water heating. School buildings not receiving every energy requirement electrically shall be separately metered from the above defined service and served under the applicable rate. Other fuels may be used as incidental to and for instructional laboratory and other miscellaneous purposes without affecting the availability of this rate.

At those locations where the school owns its distribution system and makes the service connections to the various buildings and/or load centers, Company shall be given the option of providing service by use of the existing Customer-owned distribution system, or of constructing its own facilities in accordance with the Company's Overhead Construction Standards. In any event, Company's investment in the facilities it provides may be limited to an amount not exceeding twice the estimated annual revenue from Customer's service. Should Company's investment in the facilities required to provide service to Customer exceed twice the revenue anticipated from the service to Customer and at Customer's option, Customer may make a contribution for the difference in the investment required in facilities necessary to provide service and twice the anticipated revenue, so as to receive service under this schedule.

This Rate Schedule is not available to privately operated kindergartens or daycare centers and is restricted to those customers who were qualified for and being served on Rate AES as of July 1, 2011. Because this rate schedule is closed to new customers, if Customer is taking service under this rate schedule and subsequently elects to take service under another rate schedule, Customer may not again take service under this rate schedule.

RATE

Basic Service Charge per meter per month: \$85.00 single-phase service

\$140.00 three-phase service

Plus an Energy Charge per kWh: \$ 0.082448087

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State Regulation and Rates Lexington, Kentucky

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P.S.C. No. 18, Second-Third Revision of Original Sheet No. 15 Canceling P.S.C. No. 18, First Second Revision of Original Sheet No. 15

Standard Rate

PS

POWER SERVICE

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

This rate schedule is available for secondary or primary service.

Service under this schedule will be limited to customers whose 12-month-average monthly minimum secondary loads exceed 50 kW and whose 12-month-average monthly maximum loads do not exceed 250 kW. Secondary or primary customers receiving service under PSC 13, Fourth Revision of Original Sheet No. 20, Large Power Service, or Fourth Revision of Original Sheet No. 30, Mine Power Service, as of February 6, 2009, with loads not meeting these criteria will continue to be served under this rate at their option. If Customer is taking service under this rate schedule and subsequently elects to take service under another rate schedule, Customer may not again take service under this rate schedule unless and until Customer meets the Availability requirements that would apply to a new customer.

RATE Basic Service Charge per month:	Secondary \$90.00		rimary 240.00	
Plus an Energy Charge per kWh:	\$ 0. 03270 <u>0311</u>	<u>3</u> \$	0. 03171 <u>03014</u>	<u>R</u>
Plus a Demand Charge per kW: Summer Rate: (Five Billing Periods of May through September) Winter Rate:	\$21.03	\$	21.21	ŧ
(All other months)	\$18.81	\$	19.02	ŧ

Where the monthly billing demand is the greater of:

- a) the maximum measured load in the current billing period but not less than 50 kW for secondary service or 25 kW for primary service, or
- b) a minimum of 50% of the highest measured load in the preceding eleven (11) monthly billing periods, or
- c) if applicable, a minimum of 60% of the contract capacity based on the maximum expected load on the system or on facilities specified by Customer.

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State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2019-00004 dated XXXX 2017-00266 dated December 19, 2017

<u>R</u>

Kentucky Utilities Company

P.S.C. No. 18, Third Fourth Revision of Original Sheet No. 20 Canceling P.S.C. No. 18, Second Third Revision of Original Sheet No. 20

Standard Rate

TODS

TIME-OF-DAY SECONDARY SERVICE

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

This schedule is available for secondary service. Service under this schedule will be limited to customers whose 12-month-average monthly minimum loads exceed 250 kW and whose 12month-average monthly maximum loads do not exceed 5,000 kW.

RATE

Basic Service Charge per month: \$200.00

Plus an Energy Charge per kWh: \$ 0.0322903072

Plus a Maximum Load Charge per kW:

Peak Demand Period: \$ 8.09 Intermediate Demand Period: 6.41 Base Demand Period: 3.03

Where:

the monthly billing demand for the Peak and Intermediate Demand Periods is the greater of:

- a) the maximum measured load in the current billing period, or
- a minimum of 50% of the highest measured load in the preceding eleven (11) monthly billing periods, and

the monthly billing demand for the Base Demand Period is the greater of:

- the maximum measured load in the current billing period but not less than 250 kW, or
- b) the highest measured load in the preceding eleven (11) monthly billing periods, or
- the contract capacity based on the maximum load expected on the system or on facilities specified by Customer.

ADJUSTMENT CLAUSES

The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

Fuel Adjustment Clause	Sheet No. 85	
Off-System Sales Adjustment Clause	Sheet No. 88	
Demand-Side Management Cost Recovery Mechanism	Sheet No. 86	
Environmental Cost Recovery Surcharge	Sheet No. 87	
Tax Cuts and Jobs Act Surcredit	Sheet No. 89	N
Franchise Fee Rider	Sheet No. 90	
School Tax	Sheet No. 91	

DATE OF ISSUE: February 25, 2019 April 5, 2018

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State Regulation and Rates

Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2019-00004 dated XXXX

P.S.C. No. 18, Third Fourth Revision of Original Sheet No. 22 Canceling P.S.C. No. 18, Second Third Revision of Original Sheet No. 22

Standard Rate

TODP

TIME-OF-DAY PRIMARY SERVICE

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

This schedule is available for primary service to any customer: (1) who has a 12-month-average monthly minimum demand exceeding 250 kVA; and (2) whose new or additional load receives any required approval of Company's transmission operator.

RATE

Basic Service Charge per month: \$330.00

Plus an Energy Charge per kWh: \$ 0.0313602979

<u>R</u>

Plus a Maximum Load Charge per kVA:

Peak Demand Period: \$ 6.71 Intermediate Demand Period: \$ 5.31 Base Demand Period: \$ 3.03

Where:

the monthly billing demand for the Peak and Intermediate Demand Periods is the greater of:

- a) the maximum measured load in the current billing period, or
- b) a minimum of 50% of the highest measured load in the preceding eleven (11) monthly billing periods, and

the monthly billing demand for the Base Demand Period is the greater of:

- a) the maximum measured load in the current billing period but not less than 250 kVA, or
- b) the highest measured load in the preceding eleven (11) monthly billing periods, or
- the contract capacity based on the maximum load expected on the system or on facilities specified by Customer.

ADJUSTMENT CLAUSES

The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

Fuel Adjustment Clause	Sheet No. 85	
Off-System Sales Adjustment Clause	Sheet No. 88	
Demand-Side Management Cost Recovery Mechanism	Sheet No. 86	
Environmental Cost Recovery Surcharge	Sheet No. 87	
Tax Cuts and Jobs Act Surcredit	Sheet No. 89	N
Franchise Fee Rider	Sheet No. 90	
School Tax	Sheet No. 91	

DATE OF ISSUE: February 25, 2019 April 5, 2018

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State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2019-00004 dated XXXX

P.S.C. No. 18, <u>Third-Fourth</u> Revision of Original Sheet No. 25 Canceling P.S.C. No. 18, <u>Second-Third</u> Revision of Original Sheet No. 25

Standard Rate

RTS

RETAIL TRANSMISSION SERVICE

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

This schedule is available for transmission service to any customer: (1) who has a 12-month-average monthly minimum demand exceeding 250 kVA; and (2) whose new or additional load receives any required approval of Company's transmission operator.

RATE

Basic Service Charge per month: \$1,500.00

Plus an Energy Charge per kWh: \$ 0.03058-<u>02901</u>

Plus a Maximum Load Charge per kVA:

Peak Demand Period: \$ 6.55 Intermediate Demand Period: \$ 5.18 Base Demand Period: \$ 2.23

Where:

the monthly billing demand for the Peak and Intermediate Demand Periods is the greater of:

- a) the maximum measured load in the current billing period, or
- a minimum of 50% of the highest measured load in the preceding eleven (11) monthly billing periods, and

the monthly billing demand for the Base Demand Period is the greater of:

- a) the maximum measured load in the current billing period but not less than 250 kVA, or
- b) the highest measured load in the preceding eleven (11) monthly billing periods, or
- c) the contract capacity based on the maximum load expected on the system or on facilities specified by Customer.

ADJUSTMENT CLAUSES

The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

N

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State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No.

2019-00004 dated XXXX

P.S.C. No. 18, Second Third Revision of Original Sheet No. 30 Canceling P.S.C. No. 18, First Second Revision of Original Sheet No. 30

Standard Rate

FLS

Fluctuating Load Service

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

Available for primary or transmission service to customers up to an aggregate of two hundred (200) MVA for all customers taking service under this schedule and under the Fluctuating Load Service Rate FLS schedule of Louisville Gas and Electric Company. This schedule is restricted to individual customers whose monthly demand is twenty (20) MVA or greater. A customer is defined as a fluctuating load if that customer's load either increases or decreases twenty (20) MVA or more per minute or seventy (70) MVA or more in ten (10) minutes when such increases or decreases exceed one (1) occurrence per hour during any hour of the billing month.

Subject to the above aggregate limit of two hundred (200) MVA, this schedule is mandatory for all customers whose load is defined as fluctuating and not served on another standard rate schedule as of July 1, 2004.

BASE RATE

		Primary	Transr	<u>nission</u>	
Basic Service Charge per month:	ervice Charge per month: \$330.00		\$1,500.00		
Plus an Energy Charge per kWh:	\$	0. 03136 <u>02979</u>	\$	0.0303602879	<u>R</u>
Plus a Maximum Load Charge per kVA: Peak Demand Period: Intermediate Demand Period: Base Demand Period:	\$ \$ \$	6.03 4.60 2.57	\$ \$ \$	3.37 2.41 1.65	‡ ‡ ‡

Where:

the monthly billing demand for the Peak and Intermediate Demand Periods is the greater of:

- a) the maximum measured load in the current billing period, or
- b) a minimum of 50% of the highest measured load in the preceding eleven (11) monthly billing periods, and

the monthly billing demand for the Base Demand Period is the greater of:

- a) the maximum measured load in the current billing period but not less than 20,000 kVA, or
- b) the highest measured load in the preceding eleven (11) monthly billing periods, or
- the contract capacity based on the maximum load expected on the system or on facilities specified by Customer.

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State Regulation and Rates

Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No.

2019-00004 dated XXXX

2017-00266 dated December 19, 2017

P.S.C. No. 18, Second Third Revision of Original Sheet No. 35 Canceling P.S.C. No. 18, First Second Revision of Original Sheet No. 35

Standard Rate

LS

Lighting Service

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

Service under this rate schedule is offered, under the conditions set out hereinafter, for lighting applications such as, but not limited to, the illumination of street, driveways, yards, lots, and other outdoor areas where secondary voltage of 120/240 is available.

Service will be provided under written contract, signed by customer prior to service commencing, when additional facilities are required.

Units marked with an asterisk (*) are not available for use in residential neighborhoods except by municipal authorities.

OVERHEAD SERVICE

Based on Customer's lighting choice, Company will furnish, own, install, and maintain the lighting unit. A basic overhead service includes lamp, fixture, photoelectric control, mast arm, and, if needed, up to 150 feet of conductor per fixture on existing wood poles (fixture only). Company will, upon request, furnish ornamental poles of Company's choosing, together with overhead wiring and all other equipment mentioned for basic overhead service.

RATE Rate	Type of	Approximate	• •		Charge	
Code	Fixture	Lumens	Light	Fixture Only	Ornamental	
High Pressu	ure Sodium					
462/472	Cobra Head	5,800	0.083	\$ 10. <u>06</u> 10	\$13. <u>73</u> 77	ţ
463/473	Cobra Head	9,500	0.117	10.4 <u>3</u> 9	14.3 <u>0</u> 6	
464/474	Cobra Head	22,000*	0.242	16. <u>15</u> 28	20. <u>30</u> 4 3	
465/475	Cobra Head	50,000*	0.471	25. <u>50</u> 75	28. <u>2853</u>	
40-	D: // .	0.500	0.44=	* • • • • • • • • • • • • • • • • • • •		
487	Directional	9,500	0.117	\$10. <u>27</u> 33		
488	Directional	22,000*	0.242	15. <u>49</u> 62		
489	Directional	50,000*	0.471	2 <u>1.84</u> 2.09		
428	Open Bottom	9,500	0.117	\$ <u>8.95</u> 9.01		
Metal Halide	е					
451	Directional	32,000*	0.350	\$2 <u>2.89</u> 3.07		
Light Emitti	ing Diode (LED)					
390	Cobra Head	8,179	0.080	\$15.8 <u>4</u> 8		
391	Cobra Head	14,166*	0.134	18. <u>53</u> 60		
392	Cobra Head	23,214*	0.228	27. <u>83</u> 95		,

DATE OF ISSUE: January 8, 2018 February 25, 2019

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State Regulation and Rates

Lexington, Kentucky

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IR

P.S.C. No. 18, Second-Third Revision of Original Sheet No. 35.1 Canceling P.S.C. No. 18, First Second Revision of Original Sheet No. 35.1

Standard Rate

LS Lighting Service

OVERHEAD SERVICE (continued)

RATE

Rate	Type of	Approximate	kW Per	Monthly Charge
Code	Fixture	Lumens	Light	Fixture Only
LED (conti	nued)			

393 Open Bottom 5,007 0.050

<u> IR</u>

IR

\$10.<u>68</u>71

Should Customer request underground service, Customer shall make a non-refundable cash contribution prior to the time of installation, or, at the option of company, make a work contribution to Company for the difference in the installed cost of the system requested and the cost of the overhead lighting system.

Where the location of existing poles is not suitable or where there are no existing poles for mounting of lights, and Customer requests service under these conditions, Company may furnish the requested facilities at an additional charge to be determined under the Excess Facilities Rider.

UNDERGROUND SERVICE

Based on Customer's lighting choice, Company will furnish, own, install, and maintain poles, fixtures, and any necessary circuitry up to 200 feet. All poles and fixtures furnished by Company will be standard stocked materials. Company may decline to install equipment and provide service thereto in locations deemed by Company as unsuitable for underground installation.

RATE				Mo	nthly Charge	
Rate	Type of	Approximate	kW Per	Fixture	Decorative	Historic
Code	Fixture	Lumens	Light	Only	Smooth	Fluted
High Press	ure Sodium					
467	Colonial	5,800	0.083		\$12.8 <mark>04</mark>	
468	Colonial	9,500	0.117		13.0 <u>1</u> 7	
401/411	Acorn	5,800	0.083		\$17.39 43	\$24.7 <mark>26</mark>
420/430	Acorn	9,500	0.117		17.7 <u>3</u> 9	25. <u>19</u> 25
414	Victorian	5,800	0.083			\$34.28 32
415	Victorian	9,500	0.117			34. <u>47</u> 53
492/476	Contemporary	5,800	0.083	\$17.3 <mark>26</mark>	\$19. 5660	
497/477	Contemporary	9,500	0.003	17.0 20		
498/478	Contemporary	22,000*	0.117	19.91 2 4		5
499/479	Contemporary	50.000*	0.242	24.0429		0
4331413	Contemporary	50,000	U. 4 / I	24. <u>04</u> 2	5 30. <u>0120</u>	
300	Dark Sky	4,000	0.060		\$25.0 <mark>25</mark>	
301	Dark Sky	9,500	0.117		26. <u>07</u> 13	

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State Regulation and Rates

Lexington, Kentucky

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P.S.C. No. 18, <u>Third-Fourth</u> Revision of Original Sheet No. 35.2 Canceling P.S.C. No. 18, <u>Second-Third</u> Revision of Original Sheet No. 35.2

Standard Rate

Lighting Service

UNDERGROUND SERVICE (continued)

RATE	OND CENTICE (CO	illinada)	Monthly Charge				
Rate Code	Type of Fixture	Approximate Lumens	kW Per Light	Fixture Only	Decorative Smooth		
Metal Halid	le					_	
491/495	Contemporary	32,000*	0.350	\$24. <u>77</u> 95	\$3 <u>8.96</u> 9.14	<u>R</u>	
Light Emitt	ting Diode (LED)						
396	Cobra Head	8,179	0.080		\$36. <u>36</u> 40		
397	Cobra Head	14,166*	0.134		39. <mark>0512</mark>		
398	Cobra Head	23,214*	0.228		48. <u>34</u> 46		
399	Colonial, 4-Sided	5,665	0.068		\$38. <u>1822</u>	\downarrow	

Customer shall make a non-refundable cash contribution prior to the time of installation, or, at the option of Company, make a work contribution to Company for the difference in the installed cost of the system requested and the cost of the conventional overhead lighting system.

Where Customer's location would require the installation of additional facilities, Company may furnish, own, and maintain the requested facilities at an additional charge per month to be determined under the Excess Facilities Rider.

DUE DATE OF BILL

Customer's payment will be due within sixteen (16) business days (no less than twenty-two (22) calendar days) from the date of the bill. Billing for this service to be made a part of bill rendered for other electric service.

DETERMINATION OF ENERGY CONSUMPTION

The kilowatt-hours will be determined as set forth on Sheet No. 67 of this Tariff.

ADJUSTMENT CLAUSES

The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

Fuel Adjustment Clause	Sheet No. 85
Off-System Sales Adjustment Clause	Sheet No. 88
Environmental Cost Recovery Surcharge	Sheet No. 87
Tax Cuts and Jobs Act Surcredit	Sheet No. 89
Franchise Fee Rider	Sheet No. 90
School Tax	Sheet No. 91

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State Regulation and Rates Lexington, Kentucky

Lexington, Kentucky

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IR

Kentucky Utilities Company

P.S.C. No. 18, Second Third Revision of Original Sheet No. 36 Canceling P.S.C. No. 18, First Second Revision of Original Sheet No. 36

Standard Rate

RLS

Restricted Lighting Service

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

Service under this rate schedule is restricted to those lighting fixtures/poles in service as of January 1, 2013, except where a spot replacement maintains the continuity of multiple fixtures/poles comprising a neighborhood lighting system or continuity is desired for a subdivision being developed in phases. Spot placement of restricted fixtures/poles is contingent on the restricted fixtures/poles being available from manufacturers. Spot replacement of restricted units will be made under the terms and conditions provided for under non-restricted Lighting Service Rate LS. Spot replacements will not be available for Mercury Vapor and Incandescent rate codes.

In the event restricted fixtures/poles fail and replacements are unavailable, Customer will be given the choice of having Company remove the failed fixture/pole or replacing the failed fixture/pole with other available fixture/pole.

Units marked with an asterisk (*) are not available for use in residential neighborhoods except by municipal authorities.

OVERHEAD SERVICE

Based on Customer's lighting choice, Company has furnished, installed, and maintained the lighting unit complete with lamp, fixture, photoelectric control, mast arm, and, if needed, up to 150 feet of conductor per fixture on existing wood poles (fixture only). Company has, upon request, furnished poles, of Company's choosing, together with overhead wiring and all other equipment mentioned for overhead service.

RATE				Monthly	Charge
Rate Code	Type of Fixture	Approximate Lumens	kW Per Light	Fixture Only	Fixture and Pole
High Pressur	e Sodium				
461/471 409	Cobra Head Cobra Head	4,000 50,000	0.060 0.471	\$9.03 <u>0</u> 1 <u>3.96</u> 4.21	\$12.3 <u>2</u> 5
426	Open Bottom	5,800	0.083	8.7 <u>4</u> 8	
Metal Halide					
450/454 455 452/459	Directional Directional Directional	12,000* 32,000* 107,800*	0.150 0.350 1.080	\$16. <u>39</u> 4 7 4 <u>7.8.0952</u>	\$21. <u>1523</u> 27. <u>65</u> 8 3 52. 84 27
Mercury Vapo	or				
446/456 447/457 448/458	Cobra Head Cobra Head Cobra Head	7,000 10,000 20,000	0.207 0.294 0.453	\$10. <u>82</u> 93 12. <u>75</u> 90 14. <u>32</u> 56	\$13. <u>32</u> 4 3 1 <u>4.975.12</u> 1 <u>6.80</u> 7.04
404	Open Bottom	7,000	0.207	11. <u>85</u> 96	

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State Regulation and Rates Lexington, Kentucky

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Kentucky Utilities Company

P.S.C. No. 18, Second Third Revision of Original Sheet No. 36.1 Canceling P.S.C. No. 18, First Second Revision of Original Sheet No. 36.1

Standard Rate

Restricted Lighting Service

OVERHEAD SERVICE (continued)

RATE Rate Code	Type of Fixture	Approximate Lumens	kW Per Light	Monthly Charge Fixture Only	
Incandesc	ent				
421	Tear Drop	1,000	0.102	\$ 3.76 81	
422	Tear Drop	2,500	0.201	4. 945.05	
424	Tear Drop	4,000	0.327	7.34 51	
425	Tear Drop	6,000	0.447	<u>9.79</u> 10.02	

Where the location of existing poles was not suitable, or where there were no existing poles for mounting of lights, and Customer requested service under these conditions, Company may have furnished the requested facilities at an additional charge determined under the Excess Facilities Rider.

UNDERGROUND SERVICE

Based on Customer's lighting choice, Company has furnished, installed, and maintained the lighting unit complete with lamp, fixture, photoelectric control, mast arm, and, if needed, up to 200 feet of conductor per fixture on appropriate poles.

RATE				Moi	nthly Charge	
Rate Code	Type of Fixture	Approximate Lumens	kW Per Light	Fixture Only	Decorative Smooth	Historic Fluted
Metal Halid	e					
460	Directional	12,000	0.150		\$31. <u>49</u> 57	
469	Directional	32,000	0.350		37. <u>09</u> 27	
470	Directional	107,800*	1.080		6 <u>1.48</u> 2.05	
490/494	Contemporary	12,000*	0.150	\$17. <u>71</u> 79	\$31. <u>68</u> 76	
493/496	Contemporary	107,800*	1.080	51. <u>14</u> 71	65. <u>10</u> 67	
High Press	ure Sodium					
440/410	Acorn	4,000	0.060		\$15.8 <u>5</u> 8	\$23.3 <mark>0</mark> 3
466	Colonial	4,000	0.060		\$11.3 <u>4</u> 7	
412	Coach	5,800	0.083		\$34. <u>27</u> 31	
413	Coach	9,500	0.117		34. <u>48</u> 54	

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State Regulation and Rates Lexington, Kentucky

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2017-00266 dated December 19, 2017

2019-00004 dated XXXX

N

Kentucky Utilities Company

P.S.C. No. 18, <u>Third-Fourth</u> Revision of Original Sheet No. 36.2 Canceling P.S.C. No. 18, <u>Second Third</u> Revision of Original Sheet No. 36.2

Standard Rate

RLS

Restricted Lighting Service

UNDERGROUND SERVICE (continued)

ATE Rate Code	Type of Fixture	Approximate Lumens	kW Per Light	Monthly Charge Decorative Smooth	
360	Granville	16,000	0.181	\$63. <u>67</u> 7 6	<u>R</u>

Granville units are restricted to installations for the City of London.

DUE DATE OF BILL

Payment is due within sixteen (16) business days (no less than twenty-two (22) calendar days) from the date of the bill. Billing for this service to be made a part of the bill rendered for other electric service.

DETERMINATION OF ENERGY CONSUMPTION

The kilowatt-hours will be determined as set forth on Sheet No. 67 of this Tariff.

ADJUSTMENT CLAUSES

The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

Fuel Adjustment Clause	Sheet No. 85
Off-System Sales Adjustment Clause	Sheet No. 88
Environmental Cost Recovery Surcharge	Sheet No. 87
Tax Cuts and Jobs Act Surcredit	Sheet No. 89
Franchise Fee Rider	Sheet No. 90
School Tax	Sheet No. 91

TERM OF CONTRACT

For a fixed term of not less than five (5) years and for such time thereafter until terminated by either party giving thirty (30) days prior written notice to the other when additional facilities are required. Cancellation by Customer prior to the initial five-year term will require Customer to pay to Company a lump sum equal to the monthly charge times the number of months remaining on the original five (5) year term.

TERMS AND CONDITIONS

- 1. Service shall be furnished under Company's Terms and Conditions, except as set out herein.
- All service and maintenance will be performed only during regular scheduled working hours of Company. Customer will be responsible for reporting outages and other operating faults, and the Company shall initiate service corrections within two (2) business days after such notification by Customer.

DATE OF ISSUE: April 5, 2018 February 25, 2019

DATE EFFECTIVE: September 1, 2019 April 1, 2018

ISSUED BY: /s/ Robert M. Conroy, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No.

2019-00004 dated XXXX

P.S.C. No. 18, Third Fourth Revision of Original Sheet No. 37 Canceling P.S.C. No. 18, Second Third Revision of Original Sheet No. 37

Standard Rate

LE

Lighting Energy Service

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

Available to municipalities, county governments, divisions or agencies of the state or Federal governments, civic associations, and other public or quasi-public agencies for service to public street and highway lighting systems, where the municipality or other agency owns and maintains all street lighting equipment and other facilities on its side of the point of delivery of the energy supplied hereunder.

RATE

\$0.07264 <u>07107</u> per kWh

<u>R</u>

ADJUSTMENT CLAUSES

The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

Fuel Adjustment Clause	Sheet No. 85	
Off-System Sales Adjustment Clause	Sheet No. 88	
Environmental Cost Recovery Surcharge	Sheet No. 87	
Tax Cuts and Jobs Act Surcredit	Sheet No. 89	N
Franchise Fee Rider	Sheet No. 90	
School Tax	Sheet No. 91	

DUE DATE OF BILL

Customer's payment will be due within sixteen (16) business days (no less than twenty-two (22) calendar days) from the date of the bill.

CONDITIONS OF DELIVERY

- Service hereunder will be metered except when, by mutual agreement of Company and customer, an unmetered installation will be more satisfactory from the standpoint of both parties. In the case of unmetered service, billing will be based on a calculated consumption taking into account the types of equipment served.
- The location of the point of delivery of the energy supplied hereunder and the voltage at which such delivery is effected shall be mutually agreed upon by Company and the customer in consideration of the type and size of customer's street lighting system and the voltage which Company has available for delivery.

TERMS AND CONDITIONS

Service will be furnished under Company's Terms and Conditions applicable hereto.

DATE OF ISSUE: February 25, 2019 April 5, 2018

DATE EFFECTIVE: September 1, 2019 April 1, 2018

ISSUED BY: /s/ Robert M. Conroy, Vice President

State Regulation and Rates

Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2019-00004 dated XXXX

R

Kentucky Utilities Company

P.S.C. No. 18, Third Fourth Revision of Original Sheet No. 38 Canceling P.S.C. No. 18, Second Third Revision of Original Sheet No. 38

Standard Rate

TE

Traffic Energy Service

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

Available to municipalities, county governments, divisions of the state or Federal governments or any other governmental agency for service on a 24-hour all-day every-day basis, where the governmental agency owns and maintains all equipment on its side of the point of delivery of the energy supplied hereunder. In the application of this rate each point of delivery will be considered as a separate customer.

This service is limited to traffic control devices including, but not limited to, signals, cameras, or other traffic lights, electronic communication devices, and emergency sirens.

RATE

Basic Service Charge per month: \$4.00 per delivery point

Plus an Energy Charge per kWh: \$0.0895508798

ADJUSTMENT CLAUSES

The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

Fuel Adjustment Clause	Sheet No. 85
Off-System Sales Adjustment Clause	Sheet No. 88
Environmental Cost Recovery Surcharge	Sheet No. 87
Tax Cuts and Jobs Act Surcredit	Sheet No. 89
Franchise Fee Rider	Sheet No. 90
School Tax	Sheet No. 91

MINIMUM CHARGE

The Basic Service Charge shall be the minimum charge.

DUE DATE OF BILL

Customer's payment will be due within sixteen (16) business days (no less than twenty-two (22) calendar days) from the date of the bill.

CONDITIONS OF SERVICE

 Service hereunder will be metered except when, by mutual agreement of Company and customer, an unmetered installation will be more satisfactory from the standpoint of both parties. In the case of unmetered service, billing will be based on a calculated consumption, taking into account the size and characteristics of the load, or on meter readings obtained from a similar installation.

DATE OF ISSUE: February 25, 2019 April 5, 2018

DATE EFFECTIVE: September 1, 2019 April 1, 2018

ISSUED BY: /s/ Robert M. Conroy, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No.

2019-00004 dated XXXX

P.S.C. No. 18, Second Third Revision of Original Sheet No. 79
Canceling P.S.C. No. 18, First Second Revision of Original Sheet No. 79

Standard Rate

SPS

SCHOOL POWER SERVICE

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

This rate schedule is available as an option for secondary service P-12 schools whose 12-month-average monthly minimum secondary loads exceed 50 kW and whose 12-month-average monthly maximum loads do not exceed 250 kW.

Service under this rate schedule is limited until the total projected revenue impact for customers taking service under SPS and STOD combined is \$750,000 annually compared to the projected annual revenues for the participating schools under the rates under which the schools would otherwise be served; wherein such projected impacts shall be calculated on billing data for the most recent 12-month period available to the Companies. The Kentucky School Boards Association ("KSBA") will be responsible for proposing schools for participation in this optional rate and the order in which such schools are proposed. KU will calculate and provide to KSBA the projected revenue impact of each proposed school.

A customer electing to take service under this rate schedule who subsequently elects to take service under another rate schedule, may not be allowed to return to this optional rate for 12 months from the date of exiting this rate schedule.

This rate schedule will expire on July 1, 2020 or when KU files it next base rate case, whichever is earlier. Customers on this rate schedule will be transferred at that time to the rate schedule under which they were formerly served.

RATE Secondary
Basic Service Charge per month: \$90.00

Plus an Energy Charge per kWh: \$ 0.03289 03132

<u>R</u>

Plus a Demand Charge per kW:

Summer Rate:

(Five Billing Periods of May through September) \$18.75
Winter Rate:

(All other months) \$16.78

Where the monthly billing demand is the greater of:

- a) the maximum measured load in the current billing period but not less than 50 kW, or
- b) a minimum of 50% of the highest measured load in the preceding eleven (11) monthly billing periods, or
- if applicable, a minimum of 60% of the contract capacity based on the maximum expected load on the system or on facilities specified by Customer.

DATE OF ISSUE: February 25, 2019 January 8, 2018

DATE EFFECTIVE: September 1, 2019 January 30, 2018

ISSUED BY: /s/ Robert M. Conroy, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No.

2019-00004 dated XXXX

2017-00266 dated December 19, 2017

Note, proposed changes to Tariff Sheet Nos. 79 (School Power Service) and 80 (School Time of Day Service) are being provided for illustrative purposes only. While both tariffs expired on September 28, 2018 with the filing of KU's (Case base rate case 2018-00294), both are still reflected Company's the in current Commission approved tariffs.

P.S.C. No. 18, Second Third Revision of Original Sheet No. 80 Canceling P.S.C. No. 18, First Second Revision of Original Sheet No. 80

Standard Rate

SCHOOL TIME-OF-DAY SERVICE

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

This rate schedule is available as an option for secondary service P-12 schools whose 12-monthaverage monthly minimum loads exceed 250 kW.

Service under this rate schedule is limited until the total projected revenue impact for customers taking service under SPS and STOD combined is \$750,000 annually compared to the projected annual revenues for the participating schools under the rates under which the schools would otherwise be served; wherein such projected impacts shall be calculated on billing data for the most recent 12-month period available to the Companies. The Kentucky School Boards Association ("KSBA") will be responsible for proposing schools for participation in this optional rate and the order in which such schools are proposed. KU will calculate and provide to KSBA the projected revenue impact of each proposed school.

A customer electing to take service under this rate schedule who subsequently elects to take service under another rate schedule, may not be allowed to return to this optional rate for 12 months from the date of exiting this rate schedule.

This rate schedule will expire on July 1, 2020 or when KU files it next base rate case, whichever is earlier. Customers on this rate schedule will be transferred at that time to the rate schedule under which they were formerly served.

RATE Basic Service Charge per month:	Secondary \$200.00	
Plus an Energy Charge per kWh:	\$ 0. 03244<u>03087</u>	<u>R</u>
Plus a Maximum Load Charge per kW: Peak Demand Period: Intermediate Demand Period: Base Demand Period:	\$ 6.06 \$ 4.55 \$ 5.13	‡ ‡ ‡

Where:

the monthly billing demand for the Peak and Intermediate Demand Periods is the greater of:

- a) the maximum measured load in the current billing period, or
- a minimum of 50% of the highest measured load in the preceding eleven (11) monthly billing periods, and

the monthly billing demand for the Base Demand Period is the greater of:

- a) the maximum measured load in the current billing period but not less than 250 kW, or
- the highest measured load in the preceding eleven (11) monthly billing periods, or
- the contract capacity based on the maximum load expected on the system or on facilities specified by Customer.

DATE OF ISSUE: February 25, 2019 January 8, 2018

DATE EFFECTIVE: September 1, 2019 January 30, 2018

ISSUED BY: /s/ Robert M. Conroy, Vice President

State Regulation and Rates

Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2019-00004 dated XXXX 2017-00266 dated December 19, 2017

Note, proposed changes to Tariff Sheet Nos. 79 (School Power Service) and 80 (School Time of Day Service) are being provided for illustrative purposes only. While both tariffs expired on September 28, 2018 with the filing of KU's base rate case (Case No. 2018-00294), both are still reflected in the Company's current Commission approved tariffs.

N

Kentucky Utilities Company

P.S.C. No. 18, <u>Third Fourth</u> Revision of Original Sheet No. 81 Canceling P.S.C. No. 18, <u>Second Third</u> Revision of Original Sheet No. 81

Standard Rate

OSL

OUTDOOR SPORTS LIGHTING SERVICE

APPLICABLE

In all territory served.

AVAILABILITY OF SERVICE

This rate schedule is available as an optional pilot program for secondary and primary service used by a customer for lighting specifically designed for outdoor fields which are normally used for organized competitive sports. Service under this rate schedule is limited to a maximum of twenty customers. Company will accept customers on a first-come-first-served basis.

RATE

Basic Service Charge per month:

Secondary Primary \$90.00 \$240.00

Plus an Energy Charge per kWh of: \$ 0.03288_03131 \$ 0.0318903032R

Plus a Maximum Load Charge per kW of:

 Peak Demand Period
 \$ 16.75
 \$ 16.88

 Base Demand Period
 \$ 3.03
 \$ 3.03

\//hara

the monthly billing demand for the Peak Demand Period is the greater of:

- a) the maximum measured load in the billing period, or
- b) a minimum of 50% of the highest billing demand in the preceding eleven (11) monthly billing periods.

the monthly billing demand for the Base Demand Period is the greater of:

- a) the maximum measured load in the billing period, or
- b) the highest measured load in the preceding eleven (11) monthly billing periods, or
- c) if applicable, the contract capacity based on the maximum load expected on the system or on facilities specified by Customer.

ADJUSTMENT CLAUSES

The bill amount computed at the charges specified above shall be increased or decreased in accordance with the following:

Fuel Adjustment Clause	Sheet No. 85
Off-System Sales Adjustment Clause	Sheet No. 88
Demand-Side Management Cost Recovery Mechanism	Sheet No. 86
Environmental Cost Recovery Surcharge	Sheet No. 87
Tax Cuts and Jobs Act Surcredit	Sheet No. 89
Franchise Fee Rider	Sheet No. 90
School Tax	Sheet No. 91

DATE OF ISSUE: February 25, 2019 April 5, 2018

DATE EFFECTIVE: September 1, 2019 April 1, 2018

ISSUED BY: /s/ Robert M. Conroy, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2019-00004 dated XXXX

2018-00034 dated March 20, 2018 and modified March 28, 2018

P.S.C. No. 18, First Second Revision of Original Sheet No. 85.1 Canceling P.S.C. No. 18, First Revision of Original Sheet No. 85.1

Adjustment Clause

FAC Fuel Adjustment Clause

- (3) Forced outages are all non-scheduled losses of generation or transmission which require substitute power for a continuous period in excess of six (6) hours. Where forced outages are not as a result of faulty equipment, faulty manufacture, faulty design, faulty installations, faulty operation, or faulty maintenance, but are Acts of God, riot, insurrection or acts of the public enemy, then the utility may, upon proper showing, with the approval of the Commission, include the fuel cost of substitute energy in the adjustment. Until such approval is obtained, in making the calculations of fuel cost (F) in subsection (2)(a) and (b) above, the forced outage costs to be subtracted shall be no less than the fuel cost related to the lost generation.
- (4) Sales (S) shall be all kWh sold, excluding inter-system sales. Where, for any reason, billed system sales cannot be coordinated with fuel costs for the billing period, sales may be equated to the sum of (i) generation, (ii) purchases, (iii) interchange in, less (iv) energy associated with pumped storage operations, less (v) inter-system sales referred to in subsection (2)(d) above, less (vi) total system losses. Utility used energy shall not be excluded in the determination of sales (S).
- (5) The cost of fossil fuel shall include no items other than the invoice price of fuel less any cash or other discounts. The invoice price of fuel includes the cost of the fuel itself and necessary charges for transportation of the fuel from the point of acquisition to the unloading point, as listed in Account 151 of FERC Uniform System of Accounts for Public Utilities and Licensees.
- (6) Base (b) period shall be August December 20157, and the base fuel factor is \$0.02452609 T/R per kWh.
- (7) Current (m) period shall be the second month preceding the month in which the Fuel Clause Adjustment Factor is billed.

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DATE OF ISSUE: August 4, 2017 February 25, 2019

DATE EFFECTIVE: September 1, 20197

ISSUED BY: /s/ Robert M. Conroy, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 20179-000043 dated XXXXJuly 31, 2017

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

Case No. 2019-00004

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:

Year Ending	Peak Demand (MW)
October 31, 2017	4,016
October 31, 2018	4,790

b. Average annual system demand:

Year Ending	Average Demand (MW)*
October 31, 2017	2,430
October 31, 2018	2,574

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

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

Case No. 2019-00004

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 KU has taken to reduce line loss during this period.

A-29.

- a. See attached.
- b. KU's transmission and distribution system is constantly being expanded and 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.

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	1,657,549,000	89,611,820	22,550,403,000	1,271,529,009	5.638609%
2	Dec-16	2,024,824,000	113,895,423	22,757,114,000	1,294,152,558	5.686804%
3	Jan-17	2,011,270,000	114,748,450	22,564,285,000	1,267,478,201	5.617188%
4	Feb-17	1,637,138,000	104,056,079	22,288,188,000	1,278,104,112	5.734446%
5	Mar-17	1,798,403,000	102,118,893	22,350,894,000	1,265,544,546	5.662165%
6	Apr-17	1,608,924,000	99,617,631	22,342,102,000	1,274,278,379	5.703485%
7	May-17	1,715,392,000	84,303,188	22,369,710,000	1,266,348,916	5.660998%
8	Jun-17	1,836,433,000	113,689,196	22,243,175,000	1,274,811,290	5.731247%
9	Jul-17	2,044,219,000	121,037,685	22,186,706,000	1,267,746,178	5.713990%
10	Aug-17	1,932,231,000	101,483,360	21,911,756,000	1,258,885,827	5.745253%
11	Sep-17	1,714,638,000	98,505,158	21,721,426,000	1,237,298,431	5.696212%
12	Oct-17	1,661,226,000	99,131,698	21,642,247,000	1,242,198,581	5.739693%
13	Nov-17	1,778,983,000	93,393,563	21,763,681,000	1,245,980,324	5.725044%
14	Dec-17	2,031,828,000	123,879,279	21,770,685,000	1,255,964,180	5.769061%
15	Jan-18	2,524,897,000	154,890,498	22,284,312,000	1,296,106,228	5.816227%
16	Feb-18	1,731,838,000	126,588,705	22,379,012,000	1,318,638,854	5.892301%
17	Mar-18	1,846,309,000	90,859,834	22,426,918,000	1,307,379,795	5.829512%
18	Apr-18	1,641,546,000	120,934,090	22,459,540,000	1,328,696,254	5.915955%
19	May-18	1,856,941,000	70,581,761	22,601,089,000	1,314,974,827	5.818192%
20	Jun-18	1,929,456,000	129,850,050	22,694,112,000	1,331,135,681	5.865555%
21	Jul-18	2,031,797,000	131,967,167	22,681,690,000	1,342,065,163	5.916954%
22	Aug-18	2,029,157,000	109,608,857	22,778,616,000	1,350,190,660	5.927448%
23	Sep-18	1,852,534,000	128,786,772	22,916,512,000	1,380,472,274	6.023920%
24	Oct-18	1,781,868,000	90,653,810	23,037,154,000	1,371,994,386	5.955572%

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

Case No. 2019-00004

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	6,786,927	\$321,284,703
2020 Projected Coal Purchases	6,791,604	\$319,781,924

Natural gas purchases in 2019 Business Plan:

	<u>MMBtu</u>	<u>Dollars</u>
2019 Projected Natural Gas Purchases	39,349,458	\$131,412,449
2020 Projected Natural Gas Purchases	36,292,742	\$124,307,937

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

Case No. 2019-00004

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. KU's most recent sales projections for 2019 and 2020 are:

	Sales (kWh)	<u>Dollars</u>
2019 Ultimate Consumers	17,867,864,917	\$1,546,738,320
2020 Ultimate Consumers	17,866,242,798	\$1,590,225,719

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

Case No. 2019-00004

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. The information requested is being provided pursuant to a Petition for Confidential Treatment. See attached.

Page 1 of 2 Wilson

2019 KU Weekly Maintenance Detail

								*	*	*	*	*					*	*	*	*	*	*	*
MAINT	Br1	Br2	Br3	Gh1	Gh2	Gh3	Gh4	TC2	CR7	Br5	Br6	Br7	Br8	Br9	Br10	Br11	PR13	TC5	TC6	TC7	TC8	TC9	TC10
WEEK	107	167	411	475	484	482	476	560	691	120	157	157	118	118	118	118	161	169	169	169	169	169	169
1/7																							
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12/23																							
12/30																							

^{*} Jointly owned units between LG&E/KU
■ BR1, BR2 retiring as of 2/28/2019

2020 KU Weekly Maintenance Detail

								*	*	*	*	*					*	*	*	*	*	*	*
MAINT	Br1	Br2	Br3	Gh1	Gh2	Gh3	Gh4	TC2	CR7	Br5	Br6	Br7	Br8	Br9	Br10		PR13	TC5	TC6	TC7	TC8	TC9	TC10
WEEK	107	167	411	475	484	482	476	560	691	120	157	157	118	118	118	118	161	169	169	169	169	169	169
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Notes:

* Jointly owned units between LG&E/KU ■ BR1, BR2 retiring as of 2/28/2019

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

Case No. 2019-00004

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 KU becomes aware of any issues during the course of this proceeding.
- A-33. The Company has no unresolved or unsettled issues to report.