COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION OF THE APPLICATION OF)
THE FUEL ADJUSTMENT CLAUSE OF) CASE NO.
KENTUCKY UTILITIES COMPANY FROM) 2017-00003
NOVEMBER 1, 2014 THROUGH OCTOBER 31, 2016)

RESPONSE OF KENTUCKY UTILITIES COMPANY TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION IN APPENDIX B OF COMMISSION'S ORDER DATED FEBRUARY 6, 2017

FILED: February 20, 2017

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.

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 1744 day of Sebuary 2017.

Judy Schooler (SEAL)

Notary Public

COMMONWEALTH OF KENTUCKY)	
)	SS
COUNTY OF JEFFERSON)	

The undersigned, **Derek Rahn**, being duly sworn, deposes and says that he is Manager - Revenue Requirement 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 1644 day of 4ebuary 2017.

Notary Public

July Schooler (SEAL)

COMMONWEALTH OF KENTUCKY)	
)	SS:
COUNTY OF JEFFERSON)	

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

Eileen L. Saunders

Subscribed and sworn to before me, a Notary Public in and before said County

and State, this 17th day of February 2017.

Jelly Schooler (SEAL)

Notary Public

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.

Charlo & Acher

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 174 day of Lebelary 2017.

Judyschooler (SEAL)

Notary Public

My Commission Expires: JUDY SCHOOLER Notary Public, State at Large, KY My commission expires July 11, 2018 Notary ID # 512743

COMMONWEALTH OF KENTUCKY)	
)	SS
COUNTY OF JEFFERSON)	

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

Stuart A. Wilson

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 17th day of 1eluary 2017.

Notary Public

Jeedyschooler (SEAL)

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 1

Witness: Derek Rahn

- Q-1. 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-1. After reviewing actual FAC costs for the base period November 2014 through October 2016, Kentucky Utilities ("KU") recommends that the per unit fuel cost for August 2015 be used as the base period. The attached table shows that the per unit fuel cost for August 2015 was \$0.02609/kWh. KU estimates that the average per unit fuel cost for the calendar year 2017 will be \$0.02607/kWh and the average per unit fuel cost for the calendar year 2018 will be \$0.02577/kWh. The per unit fuel cost for August 2015 of \$0.02609/kWh approximates the weighted average of the projected fuel estimates for the two-year period of \$0.02592/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 August 2015 because this is the actual cost from the two-year expense period ending October 2016 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 August 2015 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.

Retail Fuel Adjustment Clause Fuel Cost per kWh For the Expense Months Ending October 31, 2016

(1)	(2)	(3)	(4)		(5)
Expense	Expense	FAC Base	Billing		Billing
Month	Month	\$/kWh	Month		Month
	\$/kWh			1	FAC Factor
N. 44	0.0201.5	0.0000	* 12	Φ.	Col. 2 - 3
Nov-14	\$ 0.02916	\$ 0.02892	Jan-15	\$	0.00024
Dec-14	\$ 0.03011	\$ 0.02892	Feb-15	\$	0.00119
Jan-15	\$ 0.02872	\$ 0.02892	Mar-15	\$	(0.00020)
Feb-15	\$ 0.02899	\$ 0.02892	Apr-15	\$	0.00007
Mar-15	\$ 0.02813	\$ 0.02892	May-15	\$	(0.00079)
Apr-15	\$ 0.02879	\$ 0.02892	Jun-15	\$	(0.00013)
May-15	\$ 0.02828	\$ 0.02892	Jul-15	\$	(0.00064)
Jun-15	\$ 0.02659	\$ 0.02892	Aug-15	\$	(0.00233)
Jul-15	\$ 0.02618	\$ 0.02892	Sep-15	\$	(0.00274)
Aug-15	\$ 0.02609	\$ 0.02892	Oct-15	\$	(0.00283)
Sep-15	\$ 0.02527	\$ 0.02892	Nov-15	\$	(0.00365)
Oct-15	\$ 0.02224	\$ 0.02892	Dec-15	\$	(0.00668)
Nov-15	\$ 0.02310	\$ 0.02892	Jan-16	\$	(0.00582)
Dec-15	\$ 0.02276	\$ 0.02892	Feb-16	\$	(0.00616)
Jan-16	\$ 0.02705	\$ 0.02892	Mar-16	\$	(0.00187)
Feb-16	\$ 0.02474	\$ 0.02892	Apr-16	\$	(0.00418)
Mar-16	\$ 0.02212	\$ 0.02892	May-16	\$	(0.00680)
Apr-16	\$ 0.02289	\$ 0.02892	Jun-16	\$	(0.00603)
May-16	\$ 0.02249	\$ 0.02892	Jul-16	\$	(0.00643)
Jun-16	\$ 0.02545	\$ 0.02892	Aug-16	\$	(0.00347)
Jul-16	\$ 0.02640	\$ 0.02892	Sep-16	\$	(0.00252)
Aug-16	\$ 0.02469	\$ 0.02892	Oct-16	\$	(0.00423)
Sep-16	\$ 0.02428	\$ 0.02892	Nov-16	\$	(0.00464)
Oct-16	\$ 0.02282	\$ 0.02892	Dec-16	\$	(0.00610)

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 2

Witness: Derek Rahn

- Q-2. 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-2. Attached is a copy of the Fuel Cost Schedule (Form A, Page 2) for the base period of August 2015, which shows the component of the proposed F(b) as defined by 807 KAR 5:056.

As explained in the response to Question No. 1, KU reviewed the per-unit fuel cost for each month during the November 2014 through October 2016 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 2 of 6

KENTUCKY UTILITIES COMPANY FUEL COST SCHEDULE

Expense Month: August 2015

(A) Company Generation Coal Burned Oil Burned Gas Burned Fuel (assigned cost during Forced Outage) Fuel (substitute cost for Forced Outage) SUB-TOTAL	(+) (+) (+) (+) (-)	\$ \$39,710,614 388,318 9,400,953 3,595,550 3,697,563 49,397,872	(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	(+) (+) (-) (-) (+)	\$ 698,225 - 3,534 - 564,655 118,612 1,377,958	
(C) Inter-System Sales Including Interchange-out Internal Economy Internal Replacement Dollars Assigned to Inter-System Sales Losses SUB-TOTAL	(+) (+) (+) (+)	\$ 640,202 2,787,034 67,434 3,201 3,497,871	
(D) Over or (Under) Recovery From Page 5, Line 13 TOTAL FUEL RECOVERY (A+B-C-D) =		\$ 38,689 47,239,270	

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.

Coal burned = \$11,201 Oil burned = \$61

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 3

Witness: Derek Rahn

- Q-3. 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-3. Attached is a copy of the Sales Schedule (Form A, Page 3) for the base period of August 2015, which shows the component of the proposed S(b) as defined by 807 KAR 5:056.

As explained in the response to Question No. 1, KU reviewed the per-unit fuel cost for each month during the November 2014 through October 2016 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: August 2015

(A)	Generation (Net) Purchases including interchange-in Internal Economy Internal Replacement SUB-TOTAL	(+) (+) (+) (+)	1,975,077,000 67,493,000 20,879,000 4,663,000 2,068,112,000
(B)	Inter-system Sales including interchange-out Internal Economy Internal Replacement (*) System Losses SUB-TOTAL	(+) (+) (+) (+)	21,930,000 112,826,000 2,290,000 120,624,473
	TOTAL SALES (A-B)		257,670,473 1,810,441,527

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

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 4

Witness: Derek Rahn

Q-4. 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-4.

Current Base \$0.02892/kWh

Proposed Base \$0.02609/kWh

Decrease in Base Rates \$0.00283/kWh

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 5

Witness: Delbert Billiter / Charles R. Schram

- Q-5. Provide KU's most recent projected fuel requirements for the years 2017 and 2018 in tons for coal, MMBtu for natural gas, and dollars.
- A-5. Coal purchases in 2017 Business Plan

2017 Projected Coal Purchases	<u>Tons</u> 7,364,758	<u>Dollars</u> \$357,970,250
2018 Projected Coal Purchases	7,658,077	\$356,417,194

Natural Gas purchases in 2017 Business Plan

2017 Projected Gas Purchases	MMBtu 36,818,772	<u>Dollars</u> \$117,329,487	
2018 Projected Gas Purchases	39,158,035	\$125,593,448	

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 6

- Q-6. Provide KU's most recent sales projections for the years 2017 and 2018 in kWh and dollars.
- A-6. KU's most recent sales projections for 2017 and 2018 are:

2017 Ultimate Consumers	Sales (kWh) 18,313,873,263	Dollars \$1,628,666,948
2018 Ultimate Consumers	18,332,940,828	\$1,700,485,072

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 7

- Q-7. Provide separately the amounts of power purchases used in the calculation of sales provided in response to Item 3.
- A-7. Below is the data from the Purchased Power Transaction Schedule for August 2015, which is used in the calculation of Sales as defined by 807 KAR 5:056 and shown in the response to Question No. 3.

COMPANY	kWh
Illinois Municipal Electric Agency	154,000
Indiana Municipal Power Agency	96,000
Energy Imbalance	327,000
PJM Interconnection Association	213,000
Tennessee Valley Authority	111,000
SQF Tariff Purchase Power	14,422
LQF Tariff Purchase Power	1,200
Louisville Gas and Electric Company	25,542,000
Ohio Valley Electric Corporation	22,927,000
TOTAL PURCHASES	49,385,622

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 8

- Q-8. Provide separately the amounts of intersystem power sales used in the calculation of sales provided in response to Item 3.
- A-8. Below is the data from the Sales Power Transaction Schedule for August 2015, which is used in the calculation of Sales as defined by 807 KAR 5:056 and shown in the response to Question No. 3.

COMPANY	kWh
American Electric Power Service Corp.	915,000
Cargill-Alliant, LLC	3,346,000
ETC Endure	205,000
Exelon Generation Company, LLC	1,177,000
Illinois Municipal Electric Agency	236,000
Indiana Municipal Power Agency	693,000
Energy Imbalance	556,000
Midwest Independent Transmission System Operator, Inc.	3,124,000
Owensboro Municipal Power Agency	841,000
PJM Interconnection Association	5,897,000
The Energy Authority	351,000
Tenaska Power Services Co.	88,000
Tennessee Valley Authority	3,502,000
Westar Energy, Inc.	999,000
Louisville Gas and Electric Company	115,116,000
TOTAL SALES	137,046,000

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 9

Witness: Stuart A. Wilson

- Q-9. Provide the planned maintenance schedule for each of KU's generating units for the years 2017 and 2018.
- A-9. The information requested is being provided pursuant to a Petition for Confidential Treatment. A redacted version of the requested information is attached to this response.

CONFIDENTIAL INFORMATION REDACTED

2017 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	Br1 107	167	Br3 411	Gn1 475	484	Gn3 482	Gn4 476	560	691	120	157	Br 7 157	110	110	118	118	161	169	169	169	169	169	169
1/2	107	107	411	4/3	404	402	470	300	091	120	157	137	118	118	110	110	101	109	109	109	109	109	109
1/9																							
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12/25																							

Notes: * Jointly owned un

* Jointly owned units between LG&E/KU

CONFIDENTIAL INFORMATION REDACTED

2018 KU Weekly Maintenance Detail

*	*	*	*	*		*	*	*	*	*	*	*

MAINT	Br1	Br2	Br3	Gh1	Gh2	Gh3	Gh4	TC2	CR7	Br5	Br6	Br7	Br8	Br9	Br10		PR13		TC6	TC7	TC8		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
1/1 1/8																							
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Notes: * Jointly owned units between LG&E/KU

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 10

Witness: Stuart A. Wilson

- Q-10. For the years ending October 31, 2015 and October 31, 2016, provide:
 - a. Maximum annual system demand; and
 - b. Average annual demand.
- A-10. a. Maximum annual net system demand:

Year Ending	Peak Demand (MW)
October 31, 2015	5,112
October 31, 2016	4,415

b. Average annual system demand:

Year Ending	Peak Demand (MW)
October 31, 2015	2,611
October 31, 2016	2,500

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

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 11

Witness: Stuart A. Wilson

Q-11. List all firm power commitments for KU from May 1, 2016 through October 31, 2016, and for the years 2017 and 2018 for (a) purchases and (b) sales. This list shall identify the other party (buyer or seller), the amount of commitment in MW, and the purpose of the commitment (e.g., peaking, emergency).

A-11. a. Firm Purchases

The firm purchases from Ohio Valley Electric Corporation (OVEC) for the review period are shown in the table below. KU purchased its participation ratio (2.5%) of the OVEC released capacity for the months in question:

	Companies'	KU Portion	
Utility	Amt (MW)	(MW)	Purpose
OVEC (May 2016)	~ 98	~ 30	Baseload
OVEC (Jun 2016)	~ 154	~ 47	Baseload
OVEC (Jul 2016)	~ 152	~ 47	Baseload
OVEC (Aug 2016)	~ 152	~ 47	Baseload
OVEC (Sep 2016)	~ 153	~ 47	Baseload
OVEC (Oct 2016)	~ 123	~ 38	Baseload
OVEC (Jan 2017)	~ 158	~ 49	Baseload
OVEC (Feb 2017)	~ 158	~ 49	Baseload
OVEC (Mar 2017)	~ 107	~ 33	Baseload
OVEC (Apr 2017)	~ 88	~ 27	Baseload
OVEC (May 2017)	~ 124	~ 38	Baseload
OVEC (Jun 2017)	~ 154	~ 47	Baseload
OVEC (Jul 2017)	~ 152	~ 47	Baseload
OVEC (Aug 2017)	~ 152	~ 47	Baseload
OVEC (Sep 2017)	~ 150	~ 46	Baseload
OVEC (Oct 2017)	~ 121	~ 37	Baseload
OVEC (Nov 2017)	~ 142	~ 44	Baseload
OVEC (Dec 2017)	~ 158	~ 49	Baseload
OVEC (Jan 2018)	~ 158	~ 49	Baseload
OVEC (Feb 2018)	~ 154	~ 47	Baseload
OVEC (Mar 2018)	~ 136	~ 42	Baseload
OVEC (Apr 2018)	~ 95	~ 29	Baseload
OVEC (May 2018)	~ 127	~ 39	Baseload
OVEC (Jun 2018)	~ 154	~ 47	Baseload
OVEC (Jul 2018)	~ 152	~ 47	Baseload
OVEC (Aug 2018)	~ 152	~ 47	Baseload
OVEC (Sep 2018)	~ 143	~ 44	Baseload
OVEC (Oct 2018)	~ 84	~ 26	Baseload
OVEC (Nov 2018)	~ 142	~ 44	Baseload
OVEC (Dec 2018)	~ 158	~ 49	Baseload

b. Firm Sales - None.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 12

- Q-12. Provide a monthly billing summary for all sales to all electric utilities for the period May 1, 2016 through October 31, 2016.
- A-12. See attached.



Month Ended: May-31-2016

Power Transaction Schedule

					Billing Componen	ts		
		Type of			Fuel		Other	Total
Company		Transaction	KWH	Demand(\$)	Charges(\$)		Charges(\$)	Charges(\$)
Sales								
CARGILL- ALLIANT, LLC	CARG	Economy	649,000		\$ 17,662.96	\$	6,880.73	\$ 24,543.69
ILLINOIS MUNICIPAL ELECTRIC AGENCY	IMEA	Economy	107,000		\$ 5,689.54	\$	2,216.41	\$ 7,905.95
INDIANA MUNICIPAL POWER AGENCY	IMPA	Economy	361,000		\$ 14,532.13	\$	5,965.48	\$ 20,497.61
ENERGY IMBALANCE	IMBL	Economy	561,000		\$ 14,100.68	\$	5,493.02	\$ 19,593.70
MIDWEST INDEPENDENT TRANSMISSION SYSTEM OPERATOR	R. MISO	Economy	647,000		\$ 11,174.20	\$	4,370.74	\$ 15,544.94
PJM INTERCONNECTION ASSOCIATION	PJM	Economy	1,855,000		\$ 43,341.06	\$	16,883.82	\$ 60,224.88
TENNESSEE VALLEY AUTHORITY	TVA	Economy	2,249,000		\$ 60,781.39	\$	23,677.79	\$ 84,459.18
WESTAR ENERGY, INC.	WSTR	Economy	61,000		\$ 1,453.15	\$	566.09	\$ 2,019.24
LOUISVILLE GAS & ELECTRIC	LGE	Economy	63,477,000		\$ 1,487,783.40	\$	396.88	\$ 1,488,180.28
Total Sales			69,967,000	\$ -	\$ 1,656,518.51	\$	66,450.96	\$ 1,722,969.47



WESTAR ENERGY, INC.

Total Sales

LOUISVILLE GAS & ELECTRIC

Power Transaction Schedule

Billing Components Type of Fuel Other Total **KWH** Company Transaction Demand(\$) Charges(\$) Charges(\$) Charges(\$) **Sales** CARGILL- ALLIANT, LLC CARG 802,000 24,326.21 8,094.08 \$ 32,420.29 Economy \$ \$ \$ 1,869.33 \$ \$ ILLINOIS MUNICIPAL ELECTRIC AGENCY **IMEA** Economy 60,000 621.98 2,491.31 \$ \$ \$ INDIANA MUNICIPAL POWER AGENCY **IMPA** Economy 133,000 5,042.91 1,677.94 6,720.85 \$ ENERGY IMBALANCE **IMBL** 316,000 5,712.64 \$ 1,900.77 \$ 7,613.41 Economy MIDWEST INDEPENDENT TRANSMISSION SYSTEM OPERATOR, MISO Economy 1,696,000 \$ 43,872.51 \$ 14,597.31 \$ 58,469.82 \$ PJM INTERCONNECTION ASSOCIATION PJM Economy 3,810,000 118,900.22 \$ 39,561.80 \$ 158,462.02 TEA \$ THE ENERGY AUTHORITY Economy 16,000 481.17 \$ 160.10 641.27 TPS \$ \$ TENASKA POWER SERVICES CO. Economy 62,000 1,924.65 640.39 \$ 2,565.04 TVA 877,000 \$ 40,062.25 TENNESSEE VALLEY AUTHORITY 30,060.26 10,001.99 Economy

519,000

48,822,000

57,113,000

\$

15,510.38

1,293,753.79

1,541,454.07

\$

5,160.79

4,126.01

86,543.16

20,671.17

1,297,879.80

1,627,997.23

WSTR

LGE

Economy

Economy



Power Transaction Schedule

Billing Components Type of Fuel Other Total **KWH** Company Transaction Demand(\$) Charges(\$) Charges(\$) Charges(\$) Sales CARGILL- ALLIANT, LLC CARG 1,363,000 \$ 39,032.05 \$ 17,819.86 \$ 56,851.91 Economy ETC ENDURE ETC 73,000 \$ 2,022.36 \$ 923.30 \$ Economy 2,945.66 **IMEA** 121,000 \$ \$ 3,863.92 \$ 12,327.31 ILLINOIS MUNICIPAL ELECTRIC AGENCY Economy 8,463.39 INDIANA MUNICIPAL POWER AGENCY **IMPA** Economy 168,000 \$ 11,586.90 \$ 5,289.93 \$ 16,876.83 **IMBL** 298,000 \$ 8,356.13 \$ 3,814.95 \$ 12,171.08 ENERGY IMBALANCE Economy MIDWEST INDEPENDENT TRANSMISSION SYSTEM OPERATOR, MISO 4,584,000 \$ 131,096.88 \$ 59,782.07 \$ 190,878.95 Economy PJM INTERCONNECTION ASSOCIATION PJM Economy 5,817,000 \$ 170,535.87 \$ 77,857.19 \$ 248,393.06 TEA \$ THE ENERGY AUTHORITY Economy 461,000 13,399.53 \$ 6,117.48 19,517.01 \$ TENNESSEE VALLEY AUTHORITY TVAEconomy 666,000 19,214.34 8,772.20 \$ 27,986.54 705,000 \$ \$ 30,351.94 WESTAR ENERGY, INC. WSTR 20,838.33 Economy 9,513.61 LOUISVILLE GAS & ELECTRIC LGE 46,629,000 1,170,884.96 7,662.02 1,178,546.98 Economy **Total Sales** 60,885,000 1,595,430.74 201,416.53 1,796,847.27

Energy Imbalance is used to supply energy for mismatch between scheduled delivery and actual loads that have occurred over an hour.



Power Transaction Schedule

Billing Components Type of Fuel Other Total

Commony		Transaction	KWH	Domand(©)	Characa(f)	Charges (f)	Characa(f)
Company		Transaction	КWП	Demand(\$)	 Charges(\$)	 Charges(\$)	 Charges(\$)
Sales							
CARGILL- ALLIANT, LLC	CARG	Economy	481,000		\$ 14.986.63	\$ 7.073.15	\$ 22,059.78
EXELON GENERATION COMPANY, LLC	EXEL	Economy	66,000		\$ 2.906.73	\$ 1.371.87	\$ 4.278.60
ILLINOIS MUNICIPAL ELECTRIC AGENCY	IMEA	Economy	217,000		\$ 1,665.44	\$ 1,210.43	\$ 2,875.87
INDIANA MUNICIPAL POWER AGENCY	IMPA	Economy	321,000		\$ 4,207.04	\$ 2,814.40	\$ 7,021.44
ENERGY IMBALANCE	IMBL	Economy	525,000		\$ 13,706.67	\$ 6,469.05	\$ 20,175.72
MIDWEST INDEPENDENT TRANSMISSION SYSTEM OPERATO	R. MISO	Economy	4,052,000		\$ 110,357.98	\$ 52,183.91	\$ 162,541.89
PJM INTERCONNECTION ASSOCIATION	PJM	Economy	9,142,000		\$ 258,543.64	\$ 120,672.53	\$ 379,216.17
THE ENERGY AUTHORITY	TEA	Economy	361,000		\$ 9,774.28	\$ 4,613.09	\$ 14,387.37
TENNESSEE VALLEY AUTHORITY	TVA	Economy	1,711,000		\$ 49,549.50	\$ 23,385.58	\$ 72,935.08
WESTAR ENERGY, INC.	WSTR	Economy	221,000		\$ 5,775.79	\$ 2,725.97	\$ 8,501.76
LOUISVILLE GAS & ELECTRIC	LGE	Economy	62,718,000		\$ 1,536,796.31	\$ 1,713.13	\$ 1,538,509.44
Miscellaneous Adjustment		-			\$ 2,124.03	\$ 236.00	\$ 2,360.03
Total Sales			79,815,000	\$ -	\$ 2,010,394.04	\$ 224,469.11	\$ 2,234,863.15



Month Ended: September-30-2016

Power Transaction Schedule

Within Ended. September-30-2010						Billing Componen	ts			
		Type of				Fuel		Other		Total
Company		Transaction	KWH	Demand(\$)		Charges(\$)		Charges(\$)		Charges(\$)
Sales										
CARGILL- ALLIANT, LLC	CARG	Economy	776.000		\$	19.453.93	\$	12.865.52	\$	32,319.45
EXELON GENERATION COMPANY, LLC	EXEL	Economy	279,000		φ \$	8,932.14	ф \$	5.907.11	\$	14.839.25
ILLINOIS MUNICIPAL ELECTRIC AGENCY	IMEA	•	,		¢.	· ·	¢.	- ,	¢.	10.064.90
		Economy	171,000		Þ	6,058.33	Þ	4,006.57	Þ	-,
INDIANA MUNICIPAL POWER AGENCY	IMPA	Economy	1,175,000		\$	29,073.19	\$	19,227.04	\$	48,300.23
ENERGY IMBALANCE	IMBL	Economy	114,000		\$	2,572.48	\$	1,701.27	\$	4,273.75
MIDWEST INDEPENDENT TRANSMISSION SYSTEM OPERATOR	MISO	Economy	2,867,000		\$	63,997.50	\$	42,323.86	\$	106,321.36
PJM INTERCONNECTION ASSOCIATION	PJM	Economy	6,217,000		\$	199,032.80	\$	131,626.88	\$	330,659.68
TENASKA POWER SERVICES CO.	TPS	Economy	193,000		\$	5,894.55	\$	3,898.25	\$	9,792.80
TENNESSEE VALLEY AUTHORITY	TVA	Economy	5,846,000		\$	151,047.56	\$	99,892.65	\$	250,940.21
WESTAR ENERGY, INC.	WSTR	Economy	1,515,000		\$	43,039.29	\$	28,463.27	\$	71,502.56
LOUISVILLE GAS & ELECTRIC	LGE	Economy	59,726,000		\$	1,437,911.43	\$	1,606.24	\$	1,439,517.67
Total Sales			78,879,000	\$ -	\$	1,967,013.20	\$	351,518.66	\$	2,318,531.86



Power Transaction Schedule

				Billing Components							
		Type of				Fuel		Other		Total	
Company		Transaction	KWH	Demand(\$)		Charges(\$)		Charges(\$)		Charges(\$)	
<u>Sales</u>											
CARGILL- ALLIANT, LLC	CARG	Economy	2,925,000		\$	61,770.73	\$	51,460.43	\$	113,231.16	
ETC ENDURE	ETC	Economy	559,000		\$	12,417.04	\$	10,344.49	\$	22,761.53	
ILLINOIS MUNICIPAL ELECTRIC AGENCY	IMEA	Economy	70,000		\$	2,673.02	\$	2,226.86	\$	4,899.88	
INDIANA MUNICIPAL POWER AGENCY	IMPA	Economy	214,000		\$	7,292.59	\$	6,075.36	\$	13,367.95	
ENERGY IMBALANCE	IMBL	Economy	446,000		\$	8,632.84	\$	7,191.91	\$	15,824.75	
MIDWEST INDEPENDENT TRANSMISSION SYSTEM OPERATOR	MISO	Economy	4,367,000		\$	79,600.88	\$	66,314.08	\$	145,914.96	
PJM INTERCONNECTION ASSOCIATION	PJM	Economy	16,381,000		\$	406,543.05	\$	338,685.98	\$	745,229.03	
TENNESSEE VALLEY AUTHORITY	TVA	Economy	923,000		\$	17,406.27	\$	14,500.94	\$	31,907.21	
WESTAR ENERGY, INC.	WSTR	Economy	1,156,000		\$	27,088.58	\$	22,567.16	\$	49,655.74	
LOUISVILLE GAS & ELECTRIC	LGE	Economy	122,935,000		\$	2,785,218.82	\$	1,967.86	\$	2,787,186.68	
Total Sales		*	149,976,000	\$ -	\$	3,408,643.82	\$	521,335.07	\$	3,929,978.89	

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 13

Witness: Derek Rahn

- Q-13. a. Provide a schedule of the calculation of the 12-month average line loss by month for November 2014 through October 2016.
 - b. Describe the actions that KU has taken to reduce line loss during this period.

A-13. 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.

Kentucky Utilities Company 12 month Average Line Loss November 2014 - October 2016

(1)	(2)	(3)	(4)	(5)	(6)	
	Total kWh	Total kWh	12 Months	Total kWh	Current Month	
	Sources 12	System Losses	End %	Sources	Calculates	
Month	Months Ended	12 Months Ended	Losses	Current Month	System	
Current Month		Current Month			Losses (kWh)	
			(3) / (2)		(4) x (5)	
Nov-2014	23,523,022,000	1,435,972,744	6.104542%	1,923,890,000	117,444,673	
Dec-2014	23,399,204,000	1,389,239,938	5.937125%	1,999,383,000	118,705,868	
Jan-2015	23,102,930,000	1,392,060,208	6.025470%	2,272,732,000	136,942,785	
Feb-2015	23,277,900,000	1,372,866,416	5.897725%	2,282,861,000	134,636,864	
Mar-2015	23,188,089,000	1,387,272,829	5.982696%	1,911,759,000	114,374,729	
Apr-2015	23,155,766,000	1,382,569,386	5.970735%	1,562,111,000	93,269,508	
May-2015	23,189,828,000	1,360,636,254	5.867384%	1,806,112,000	105,971,527	
Jun-2015	23,273,259,000	1,355,534,110	5.824428%	2,028,368,000	118,140,834	
Jul-2015	23,534,855,000	1,358,622,697	5.772811%	2,201,548,000	127,091,205	
Aug-2015	23,556,790,000	1,373,970,702	5.832589%	2,068,112,000	120,624,473	
Sep-2015	23,668,983,000	1,342,056,934	5.670108%	1,900,502,000	107,760,516	
Oct-2015	23,622,564,000	1,357,688,768	5.747423%	1,665,186,000	95,705,283	
Nov-2015	23,350,828,000	1,358,555,412	5.818018%	1,652,154,000	96,122,617	
Dec-2015	23,169,558,000	1,338,766,318	5.778126%	1,818,113,000	105,052,860	
Jan-2016	23,100,925,000	1,338,991,165	5.796266%	2,204,099,000	127,755,441	
Feb-2016	22,731,299,000	1,295,911,469	5.701000%	1,913,235,000	109,073,527	
Mar-2016	22,555,237,000	1,278,689,754	5.669148%	1,735,697,000	98,399,232	
Apr-2016	22,610,842,000	1,275,220,375	5.639862%	1,617,716,000	91,236,950	
May-2016	22,492,514,000	1,275,843,680	5.672304%	1,687,784,000	95,736,239	
Jun-2016	22,427,114,000	1,272,754,132	5.675069%	1,962,968,000	111,399,788	
Jul-2016	22,326,254,000	1,276,218,222	5.716222%	2,100,688,000	120,079,990	
Aug-2016	22,465,323,000	1,249,702,963	5.562809%	2,207,181,000	122,781,263	
Sep-2016	22,469,789,000	1,290,059,000	5.741304%	1,904,968,000	109,370,004	
Oct-2016	22,545,008,000	1,293,464,079	5.737253%	1,740,405,000	99,851,438	

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 14

Witness: Eileen L. Saunders

Q-14. List KU's scheduled, actual, and forced outages between May 1, 2016 and October 31, 2016.

A-14. See attached.

Kentucky Utilities Company May 2016 through October 2016

	Schedule	a	Actual* HOURS OF DURATION		DURATION	REASON FOR DEVIATION FROM SCHEDULED MAINTENANCE		
(F=Forced; S=Scheduled)	FROM	то	FROM	то	Scheduled	Actual*	OR REASON FOR FORCED OUTAGE AS APPROPRIATE	
						ı		
E. W. Brown Unit 1 - Coal - 106 MW			7/27/2016 13:50	7/28/2016 9:23		19:33	Electro-Hydraulic Control (EHC) valve repair	
In-service May 1957	7/28/2016 9:23	7/28/2016 18:04	7/28/2016 9:23	7/28/2016 18:04	8:41	8:41	Boiler feed pump recirculating valve repair	
in-service may 1997	1/20/2010 9.23	1/20/2010 10:04	1/20/2010 9.25	1/20/2010 10:04	0.41	0.41	Boiler reed pump recirculating valve repair	
s	8/22/2016 2:15	8/22/2016 15:38	8/22/2016 2:15	8/22/2016 15:38	13:23	13:23	Flue Gas Desulfurization (FGD) damper inspection	
s	10/8/2016 0:50	10/11/2016 12:57	10/8/2016 0:50	10/11/2016 12:57	84:07	84:07	FGD expansion joint repair	
	40/00/0040 0:00	40/00/0040 47:44	40/00/0040 0:00	40/00/0046 47:44	44.44	44.44	Floring the Control of	
5	10/26/2016 6:00	10/26/2016 17:11	10/26/2016 6:00	10/26/2016 17:11	11:11	11:11	Electrostatic Precipitator (ESP) ground inspection	
E. W. Brown Unit 2 - Coal - 166 MW	5/4/2016 6:00	5/4/2016 16:42	5/4/2016 6:00	5/4/2016 16:42	10:42	10:42	Boiler waterwall tube leak	
In-service June 1963	8/22/2016 2:15	8/22/2016 15:38	8/22/2016 2:15	8/22/2016 15:38	13:23	13:23	FGD damper inspection	
S	9/17/2016 12:08	9/17/2016 20:28	9/17/2016 12:08	9/17/2016 20:28	8:20	8:20	Boiler steam drum terminal tube leak	
g	9/27/2016 5:28	9/29/2016 11:41	9/27/2016 5:28	9/29/2016 11:41	54:13	54:13	Boiler corner support repair	
3	9/21/2010 3.20	9/29/2010 11.41	9/21/2010 3.20	9/29/2010 11.41	54.15	34.13	Boiler Corrier Support repair	
s	10/7/2016 22:38	10/11/2016 12:57	10/7/2016 22:38	10/11/2016 12:57	86:19	86:19	FGD expansion joint repair	
s	10/26/2016 6:00	10/27/2016 17:35	10/26/2016 6:00	10/27/2016 17:35	35:35	35:35	ESP ground inspection	
E. W. Brown Unit 3 - Coal - 409 MW	5/16/2016 15:57	5/18/2016 12:00	5/16/2016 15:57	5/18/2016 12:00	44:03	44:03	Boiler waterwall tube leak	
In-service July 1971 F			7/1/2016 12:21	7/5/2016 15:36		99:15	Boiler reheat tube leak	
in-service duly 1371			7/1/2010 12.21	7/3/2010 13:30		33.13	Boiler renear tube reak	
F			7/5/2016 21:43	7/7/2016 10:41		36:58	Induced Draft (ID) fan expansion joint temporary repair	
s	8/13/2016 20:13	8/17/2016 5:56	8/13/2016 20:13	8/17/2016 5:56	81:43	81:43	ID fan expansion joint replacement	
				,,,_,				
			8/17/2016 22:43	8/18/2016 21:43		23:00	Boiler circulating water pump (BCWP) bypass line weld repair	
s	8/22/2016 2:15	8/22/2016 15:35	8/22/2016 2:15	8/22/2016 15:35	13:20	13:20	FGD damper inspection	
	G/22/20:00 2:10	5,22,201010.00	0, LL, L0 10 L. 10	5,22,20.0.00		.0.20		
F			8/29/2016 13:20	8/31/2016 17:30		52:10	Boiler waterwall tube leak	
s	10/3/2016 6:00	10/16/2016 0:07	10/3/2016 6:00	10/16/2016 0:07	306:07	306:07	Minor boiler inspection and weld repair	
Chart Unit 4 Cool 474 MW	6/20/2046 20:20	6/20/2016 24:20	6/20/2046 22:22	6/20/2046 24:22	22,50	22.50	Evacacion inint reneir	
Ghent Unit 1 - Coal - 474 MW	6/28/2016 22:39	6/29/2016 21:29	6/28/2016 22:39	6/29/2016 21:29	22:50	22:50	Expansion joint repair	
In-service February 1974	8/5/2016 23:42	8/6/2016 19:28	8/5/2016 23:42	8/6/2016 19:28	19:46	19:46	BCWP seal repair	
F			9/16/2016 18:36	9/23/2016 1:56		151:20	Boiler primary superheat tube leak	

Kentucky Utilities Company May 2016 through October 2016

Unit and Outage Type		Schedule	d	Act	ual*	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
Ghent Unit 2 - Coal - 493 MW	S	5/2/2016 22:15	5/4/2016 20:32	5/2/2016 22:15	5/4/2016 20:32	46:17	46:17	Condenser tube leak
One of the contract of the con	Ť	0/L/2010 LL:10	0/ 1/2010 20:02	0/2/2010 22:10	0/ 1/2010 20:02	10.11		Condition tabo loak
In-service April 1977	F			7/8/2016 14:27	7/10/2016 11:25		44:58	Condenser expansion joint repair
				.,				
	s	10/1/2016 0:00	10/30/2016 15:00	9/28/2016 5:12	10/23/2016 17:06	711:00	611:54	Minor turbine outage
								Ü.
	F			10/24/2016 8:27	10/24/2016 19:53		11:26	Removal of equipment following outage
	s	10/26/2016 23:11	10/29/2016 2:13	10/26/2016 23:11	10/29/2016 2:13	51:02	51:02	Air Heater inspection and adjustment
Ghent Unit 3 - Coal - 485 MW	s	5/5/2016 8:31	5/8/2016 21:20	5/5/2016 8:31	5/8/2016 21:20	84:49	84:49	Expansion joint repair
In-service May 1981	s	5/20/2016 9:43	5/30/2016 16:28	5/20/2016 9:43	5/30/2016 16:28	246:45	246:45	ID fan expansion joint replacement
	F			6/9/2016 6:47	6/9/2016 18:19		11:32	Cooling system leak repair
	S	6/9/2016 18:19	6/10/2016 9:20	6/9/2016 18:19	6/10/2016 9:20	15:01	15:01	Boiler inspection
	F			6/11/2016 19:20	6/15/2016 17:45		94:25	Temporary generator ground caused by moisture from cooler leak
	F			7/1/2016 21:22	7/3/2016 5:06		31:44	Boiler superheat tube leak
	F			7/19/2016 21:37	7/20/2016 18:32		20:55	Boiler primary superheat tube leak
	F			8/12/2016 1:09	8/13/2016 3:35		26:26	Boiler primary superheat tube leak
	F			9/22/2016 2:36	9/23/2016 23:40		45:04	Boiler reheat tube leak
	_	0/00/0040 0 00	0/00/0040 45 00	0/00/0040 0 00	0/00/0046 45 00	04.04	04.04	Dallar sala anticha landi
	S	9/28/2016 8:08	9/29/2016 15:29	9/28/2016 8:08	9/29/2016 15:29	31:21	31:21	Boiler reheat tube leak
	0	10/29/2016 0:00	11/20/2016 15:00	10/29/2016 15:54	11/18/2016 19:57	543:00	484:03	Minor boiler outage
	5	10/29/2016 0:00	11/20/2010 15:00	10/29/2010 15:54	11/10/2010 19:5/	543.00	404.03	Ivilitor boller outage
Ghent Unit 4 - Coal - 465 MW	E			7/23/2016 15:02	7/30/2016 21:06		174:04	Cooling tower inspection and repair
Official Child 4 - Coal - 405 MIVY				1/23/2010 15.02	1/30/2010 21.00		174.04	Cooling tower mapection and repail
In-service August 1984	9	8/31/2016 22:06	9/2/2016 18:15	8/31/2016 22:06	9/2/2016 18:15	44:09	44:09	Circulating water line repair
III del Floo August 1007	- 0	0,31/2010 22.00	3/2/2010 10:13	0/01/2010 22:00	3/2/2010 10:13	44.03	-4.03	Onodicing water into repair
	s	10/12/2016 22:57	10/15/2016 8:30	10/12/2016 22:57	10/15/2016 8:30	57:33	57:33	Circulating water line repair
	J	10/12/2010 22:01	.0, 10,2010 0.00	. 5/ 12/2010 22:01	.0/10/2010 0.00	07.00	07.00	Tonodialing mater and ropali

Kentucky Utilities Company May 2016 through October 2016

Unit and Outage Type	Schedule	d	Actual*		HOURS OF DURATION		REASON FOR DEVIATION FROM SCHEDULED MAINTENANCE	
(F=Forced; S=Scheduled)	FROM TO		FROM TO				OR REASON FOR FORCED OUTAGE AS APPROPRIATE	
(i -i orcea, o-ocheanea)	TROM	10	TROW	10	ocheduled	Actual	ON NEASON FOR TORGED GOTAGE AS AFT NOT KIATE	
			.,,_					
Trimble County Unit 2 - Coal - 549 MW	4/30/2016 16:06	5/9/2016 6:47	4/30/2016 16:06	5/9/2016 6:47	206:41	206:41	Turbine bearing inspection and adjustment	
			5/0/0040 0 45	5/0/0040 40 40		0.00		
In-service January 2011	•		5/9/2016 9:45	5/9/2016 16:18		6:33	Generator protection relay trip	
750/			E (4.0/004.0.40.04	E/40/0040 E-40		50.00	Deites desire leads security	
75% ownership share of 732 MW jointly owned with LG&E			5/10/2016 18:31	5/13/2016 5:10		58:39	Boiler drain leak repair	
	5/16/2016 3:44	5/18/2016 6:29	5/16/2016 3:44	5/18/2016 6:29	50:45	50:45	Wet electrostatic precipitator (WESP) inspection	
	3/10/2010 3.44	3/16/2010 0.29	3/10/2010 3.44	3/16/2010 0.29	30.43	30.43	Wet electrostatic precipitator (WESF) inspection	
			5/18/2016 19:23	5/19/2016 8:26		13:03	Generator vibration inspection	
,			3/10/2010 19.23	3/19/2010 0.20		13.03	Cenerator vibration inspection	
			5/19/2016 11:17	6/1/2016 0:00		300:43	Generator vibration repair	
			3/13/2010 11:17	0/1/2010 0:00		000.40	Contrator vibration repair	
l l			6/1/2016 0:00	7/15/2016 5:45		1061:45	Generator vibration repair extension	
			0/1/2010 0:00	7710/2010 0.40		1001.40	Contrator vibration repair extension	
l e	:		7/18/2016 12:32	7/19/2016 23:59		35:27	Boiler pressure relief repair	
			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,,				
l l	:		7/31/2016 7:42	7/31/2016 18:56		11:14	Air Heater motor trip	
			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
l l	:		7/31/2016 19:19	8/1/2016 2:59		7:40	Loss of power on transfer from Reserve to Main Aux Transformer	
 	:		9/11/2016 1:31	9/11/2016 14:58		13:27	Main steam control valve position indicator repair	
 	:		9/27/2016 6:46	9/27/2016 14:43		7:57	Primary air reference line transmitter repair	
	:		10/30/2016 8:46	10/30/2016 21:26		12:40	Steam control valve inspection and repair	
F			10/31/2016 2:17	10/31/2016 9:00		6:43	Low feedwater flow during start-up	
Cane Run Unit 7 - Gas CC - 662 MW	7/2/2016 22:33	7/3/2016 18:33	7/2/2016 22:33	7/3/2016 18:33	20:00	20:00	Heat Recovery Steam Generator (HRSG) superheat vent repair	
In-service June 2015	7/30/2016 21:12	7/31/2016 7:23	7/30/2016 21:12	7/31/2016 7:23	10:11	10:11	Shutdown for water pump tie-in to existing systems	
Jointly owned with LG&E	10/29/2016 0:00	11/20/2016 15:00	10/29/2016 0:03	11/18/2016 23:24	543:00	503:21	HRSG inspection, Combustion turbine borescope inspection	
E. W. Brown Unit 5 - Gas CT - 130 MW	10/15/2016 0:00	10/23/2016 15:00	10/19/2016 7:53	10/22/2016 14:40	207:00	78:47	Generator protection relay upgrade	
In-service June 2001								
Jointly owned with LG&E								
E. W. Brown Unit 6 - Gas CT - 146 MW	5/6/2016 5:49	5/7/2016 3:44	5/6/2016 5:49	5/7/2016 3:44	21:55	21:55	Oil pump motor replacement	
					ĺ			
In-service August 1999	7/28/2016 6:07	7/28/2016 12:27	7/28/2016 6:07	7/28/2016 12:27	6:20	6:20	Fire protection system repair	
					1			
Jointly owned with LG&E	10/15/2016 0:00	10/23/2016 15:00	10/19/2016 5:42	10/22/2016 12:27	207:00	78:45	Borescope inspection and relay protection upgrade	
			40/00/0040 45 55	10/01/00101::-	1	40.50		
<u> </u>			10/22/2016 13:25	10/24/2016 14:17	<u> </u>	48:52	Generator protection relay calibration	

Kentucky Utilities Company May 2016 through October 2016

Unit and Outage Type	Schedule	d	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	
		-	-	-				
E. W. Brown Unit 7 - Gas CT - 146 MW	10/20/2016 6:51	10/20/2016 17:53	10/20/2016 6:51	10/20/2016 17:53	11:02	11:02	Gas pipeline inspection	
In-service August 1999	10/21/2016 8:26	10/21/2016 18:41	10/21/2016 8:26	10/21/2016 18:41	10:15	10:15	Gas pipeline inspection extension	
Jointly owned with LG&E								
E. W. Brown Unit 8 - Gas CT - 121 MW			6/2/2016 11:47	6/3/2016 9:35		21:48	Generator circuit breaker repair	
In-service February 1995	6/7/2016 5:44	6/7/2016 17:12	6/7/2016 5:44	6/7/2016 17:12	11:28	11:28	Gas flow meter calibration	
III-service replically 1995	0/1/2010 3.44	0/1/2010 17:12	0/1/2010 3.44	0/1/2010 17:12	11.20	11.20	Cas now meter cambration	
s	6/30/2016 7:27	6/30/2016 16:08	6/30/2016 7:27	6/30/2016 16:08	8:41	8:41	Breaker inspection	
s	8/18/2016 5:42	8/18/2016 13:30	8/18/2016 5:42	8/18/2016 13:30	7:48	7:48	Lube oil system calibration	
E. W. Brown Unit 9 - Gas CT - 121 MW			5/12/2016 7:59	5/14/2016 9:06		49:07	Heating element replacement	
la comica la	0/44/0040 = ==	0/4/4/00/10 10 77	0/44/0040 5 ==	0/44/00/00/00	7.40	7.0	On and the standard and the standard and	
In-service January 1995	9/14/2016 5:50	9/14/2016 13:32	9/14/2016 5:50	9/14/2016 13:32	7:42	7:42	Generator step-up transformer electrical testing	
	9/26/2016 5:42	9/26/2016 13:10	9/26/2016 5:42	9/26/2016 13:10	7:28	7:28	Inlet air manifold inspection	
	3/20/2010 0.42	3/20/2010 10:10	3/20/2010 0.42	3/20/2010 10:10	7.20	7.20	inici dii maniola nopeotion	
F			10/17/2016 21:22	10/19/2016 7:21		33:59	Heating element inspection and replacement	
E. W. Brown Unit 10 - Gas CT - 121 MW	8/16/2016 7:00	8/16/2016 13:00	8/16/2016 7:00	8/16/2016 13:00	6:00	6:00	Water injection system control valve calibration	
In-service December 1995								
			_,,,,,,					
E. W. Brown Unit 11 - Gas CT - 121 MW	8/14/2016 11:00	8/14/2016 17:15	8/14/2016 11:00	8/14/2016 17:15	6:15	6:15	Gas valve calibration	
In-service May 1996	10/24/2016 14:18	10/27/2016 17:17	10/24/2016 14:18	10/27/2016 17:17	74:59	74:59	Generator protection relay upgrade	
in service may 1990	10/24/2010 14:10	10/21/2010 17:17	10/24/2010 14:10	10/21/2010 17:11	74.00	74.00	Centrator protection relay appraise	
Haefling Unit 1 - Gas CT - 12 MW	No outages > or = 6 hours							
In-service October 1970								
Haefling Unit 2 - Gas CT - 12 MW	No outages > or = 6 hours							
In-service October 1970								
HI-SELVICE OCCUDE 1370								
Paddys Run Unit 13 - Gas CT - 147 MW	10/29/2016 0:00	11/13/2016 15:00	10/24/2016 5:30	11/12/2016 10:11	375:00	460:41	High pressure gas line connection outage	
							<u> </u>	
In-service June 2001								
Jointly owned with LG&E								
			5/44/05	5/44/0				
Trimble County Unit 5 - Gas CT - 159 MW F			5/11/2016 12:49	5/14/2016 14:38		73:49	Motor operated disconnect (MOD) repair and upgrade	
In corving May 2002			6/26/2016 10:54	6/27/2016 12:44		25:50	Static start system inspection and repair	
In-service May 2002			6/26/2016 10:54	6/27/2016 12:44		25:50	Static start system inspection and repair	
Jointly owned with LG&E	9/16/2016 5:20	9/16/2016 14:48	9/16/2016 5:20	9/16/2016 14:48	9:28	9:28	Gas control valve repair	
	,,							
s	10/1/2016 0:00	10/16/2016 15:00	9/30/2016 20:23	10/15/2016 16:04	375:00	355:41	Unit controls upgrade	

Kentucky Utilities Company May 2016 through October 2016

Unit and Outage Type	Schedule	d	Acti	ual*	HOURS OF DURATION		REASON FOR DEVIATION FROM SCHEDULED MAINTENANCE
(F=Forced; S=Scheduled)	FROM	TO	FROM	то	Scheduled	Actual*	OR REASON FOR FORCED OUTAGE AS APPROPRIATE
Trimble County Unit 6 - Gas CT - 159 MW	4/22/2016 20:30	5/29/2016 14:56	4/22/2016 20:30	5/29/2016 14:56	882:26	882:26	Hot gas path inspection
Trimble dounty office day of 100 mm	4/22/2010 20:00	0/20/2010 14:00	4/22/2010 20:00	0/20/2010 14:00	002.20	002.20	Thot gas pain inspection
In-service May 2002	8/24/2016 6:26	8/24/2016 18:25	8/24/2016 6:26	8/24/2016 18:25	11:59	11:59	Gas valve servo replacement
III Service may 2002	0/24/2010 0.20	0/24/2010 10:20	0/24/2010 0:20	0/2-1/2010 10:20	11.00	11.00	Cus vaive servo replacement
Jointly owned with LG&E	10/1/2016 0:00	10/16/2016 15:00	9/30/2016 20:23	10/15/2016 22:06	375:00	361:43	Unit controls upgrade
-			0.00.00				
s	10/15/2016 22:28	10/16/2016 7:42	10/15/2016 22:28	10/16/2016 7:42	9:14	9:14	Post control upgrade system tuning
		,					
s	10/16/2016 10:56	10/17/2016 0:00	10/16/2016 10:56	10/17/2016 0:00	13:04	13:04	Post control upgrade tuning and combustion chamber repair
s	10/17/2016 0:00	10/24/2016 7:49	10/17/2016 0:00	10/24/2016 7:49	175:49	175:49	Post control upgrade tuning and combustion chamber repair extension
Trimble County Unit 7 - Gas CT - 159 MW	5/14/2016 3:00	5/14/2016 14:38	5/14/2016 3:00	5/14/2016 14:38	11:38	11:38	MOD repair and upgrade: shared equipment with TC5
In-service June 2004 S	8/23/2016 6:28	8/23/2016 16:08	8/23/2016 6:28	8/23/2016 16:08	9:40	9:40	Post outage vibration balance shot
Jointly owned with LG&E							
Trimble County Unit 8 - Gas CT - 159 MW F			5/24/2016 11:55	5/25/2016 20:05		32:10	Cooling system leak repair
In-service June 2004 F			8/9/2016 14:28	8/10/2016 10:01		19:33	Fire protection system repair
Jointly owned with LG&E							
Trimble County Unit 9 - Gas CT - 159 MW S	3/21/2016 2:27	5/4/2016 0:00	3/21/2016 2:27	5/4/2016 0:00	1053:33	1053:33	Generator rewind
In-service July 2004 S	5/4/2016 0:00	5/6/2016 22:22	5/4/2016 0:00	5/6/2016 22:22	70:22	70:22	Generator rewind extension
Jointly owned with LG&E S	10/22/2016 0:00	10/30/2016 15:00	10/24/2016 1:32	10/30/2016 17:56	207:00	160:24	Borescope inspection
Trimble County Unit 10 - Gas CT - 159 MW S	10/22/2016 0:00	10/30/2016 15:00	10/24/2016 1:32	10/31/2016 0:00	207:00	166:28	Generator protection relay upgrade
In-service July 2004 S	10/31/2016 0:00	10/31/2016 12:25	10/31/2016 0:00	10/31/2016 12:25	12:25	12:25	Gas line pressure regulating valve maintenance and tuning
Jointly owned with LG&E							

KENTUCKY UTILITIES COMPANY

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 15

Witness: Delbert Billiter

- Q-15. For each existing fuel contract categorized as long-term (i.e., one year or more in length), provide:
 - a. Supplier's name and address;
 - b. Name and location of production facility;
 - c. Date when contract was executed;
 - d. Duration of contract;
 - e. Date(s) of each contract revision, modification, or amendment;
 - f. Annual tonnage requirements;
 - g. Actual annual tonnage received since the contract's inception;
 - h. Percent of annual requirements received during the contract's term;
 - i. Base price in dollars per ton;
 - j. Total amount of price escalations to date in dollars per ton; and
 - k. Current price paid for coal under the contract in dollars per ton (i.+j).
- A-15. See attached.

Attachment to Response to Question No. 15 Page 1 of 23 Billiter

A. NAME/ADDRESS: Alliance Coal, LLC / J12007

1717 South Boulder Av., Suite 400 Tulsa, Oklahoma 74119-4886

B. PRODUCTION FACILITY:

OPERATOR Hopkins County Coal, Warrior Coal and Webster

County Coal

MINE Seller's Mines LOCATION Western Kentucky

C. CONTRACT EXECUTED DATE: December 9, 2011

D. CONTRACT DURATION: January 1, 2012 – December 31, 2016

E. CONTRACT AMENDMENTS: Amendment No. 1, effective January 1, 2013.

Determine Base price for 2013 and 2014. Amendment No. 2, effective January 1, 2014. Determine Base price for 2014 and 2015. Amendment No. 3, effective January 1, 2015. Determine Base price for 2015 and 2016. Amendment No. 4, effective January 1, 2016.

Determine Base price for 2016.

F. ANNUAL TONNAGE	2012	3,000,000 tons
REQUIREMENTS:	2013	3,000,000 tons
	2014	2 000 000 4

2014 3,000,000 tons 2015 3,000,000 tons 2016 3,000,000 tons

G. ACTUAL TONNAGE <u>LG&E</u> <u>KU</u>

RECEIVED: 2012 2,877,460 tons 14,326 tons 2013 3,065,353 tons 0 tons 2014 2,942,649 tons 60,536 tons 2015 3,027,379 tons 0 tons 2016 2,147,399 tons 257,247 tons

(through 10/31/16)

H. PERCENT OF ANNUAL 2012 96% REQUIREMENTS: 2013 102%

2013 102% 2014 100% 2015 101%

2016 80% (through 10/31/16)

Attachment to Response to Question No. 15 Page 2 of 23 Billiter

I. BASE PRICE (FOB Railcar/Barge): 2012 - \$47.00 per ton FOB Railcar

2013 - \$48.00 per ton FOB Railcar

2014 - \$47.38 per ton FOB Railcar/Barge 2015 - \$47.13 per ton FOB Railcar/Warrior 2015 - \$46.88 per ton FOB Railcar/Dotiki 2016 - \$45.75 per ton FOB Railcar/Warrior 2016 - \$45.00 per ton FOB Railcar/Dotiki

J. ESCALATIONS TO DATE: None

K. CURRENT CONTRACT PRICE: \$45.75 per ton FOB Railcar/Warrior

\$45.00 per ton FOB Railcar/Dotiki

A. NAME/ADDRESS: Alliance Coal, LLC / J16001B

1717 South Boulder Av., Suite 400 Tulsa, Oklahoma 74119-4886

B. PRODUCTION FACILITY:

OPERATOR River View Coal, LLC MINE River View Mine

LOCATION Union County, Kentucky

C. CONTRACT EXECUTED DATE: December 29, 2014

D. CONTRACT DURATION: January 1, 2016 – December 31, 2017

E. CONTRACT AMENDMENTS: Amendment No. 1, effective October 10, 2014.

Extend term to December 31, 2017. Increase Base Quantity tonnage. Update Annual Base Price for

2016 and 2017.

Contract J16001 Assignment from Patriot Coal

Sales to Alliance Coal, LLC.

F. ANNUAL TONNAGE 2016 960,000 tons

REQUIREMENTS: 2017 480,000 tons

G. ACTUAL TONNAGE LG&E KU

RECEIVED: 2016 557,197 tons 185,795 tons

(through 10/31/16)

H. PERCENT OF ANNUAL 2016 77% (through 10/31/16)

REQUIREMENTS:

I. BASE PRICE (FOB Barge): 2016 - \$46.69 per ton

2017 - \$48.25 per ton

J. ESCALATIONS TO DATE: None

K. CURRENT CONTRACT PRICE: \$46.69 per ton

Attachment to Response to Question No. 15 Page 4 of 23 Billiter

A. NAME/ADDRESS: Alliance Coal, LLC / J16008

1717 South Boulder Av., Suite 400 Tulsa, Oklahoma 74119-4886

B. PRODUCTION FACILITY:

OPERATOR Gibson County Coal, LLC

MINE Gibson South

LOCATION Gibson County, Indiana

C. CONTRACT EXECUTED DATE: March 1, 2015

D. CONTRACT DURATION: January 1, 2016 – December 31, 2017

E. CONTRACT AMENDMENTS: Amendment No.1, effective March 1, 2016

Adds FOB Barge Load Point Mount Vernon

Terminal MP 828

F. ANNUAL TONNAGE 2016 250,000 tons REQUIREMENTS: 2017 250,000 tons

G. ACTUAL TONNAGE LG&E KU

RECEIVED: 2016 0 tons 188,365 tons

(through 10/31/16)

H. PERCENT OF ANNUAL 2016 75% (through 10/31/16)

REQUIREMENTS:

I. BASE PRICE (FOB Railcar/Barge): 2016 - \$47.00 per ton FOB Railcar

\$54.50 per ton FOB Barge

2017 - \$49.00 per ton FOB Railcar

J. ESCALATIONS TO DATE: None

K. CURRENT CONTRACT PRICE: \$47.00 per ton FOB Railcar

\$54.50 per ton FOB Barge

A. NAME/ADDRESS: Arch Coal Sales Company, Inc. / J16012

1 CityPlace Drive, Suite 300 St. Louis, Missouri 63141

B. PRODUCTION FACILITY:

OPERATOR Thunder Basin Coal Company, LLC

MINES Black Thunder Complex LOCATION Campbell County, Wyoming

C. CONTRACT EXECUTED DATE: June 2, 2015

D. CONTRACT DURATION: January 1, 2016 - December 31, 2017

E. CONTRACT AMENDMENTS: None

F. ANNUAL TONNAGE 2016 600,000 tons REQUIREMENTS: 2017 600,000 tons

G. ACTUAL TONNAGE: KU

RECEIVED: 2016 343,250 (through 10/31/16)

H. PERCENT OF ANNUAL 2016 57% (through 10/31/16)

REQUIREMENTS:

I. BASE PRICE (FOB Railcar) 2016 \$11.50 per ton 2017 \$12.60 per ton

J. ESCALATIONS TO DATE: \$0.00 per ton

K. CURRENT CONTRACT PRICE: \$11.50 per ton

A. NAME/ADDRESS: Armstrong Coal Sales, LLC / J07032

407 Brown Road

Madisonville, Kentucky 42431

B. PRODUCTION FACILITY:

OPERATOR Armstrong Coal Company, Inc

MINES Various

LOCATION Muhlenberg County and Ohio County,

Kentucky

C. CONTRACT EXECUTED DATE: December 20, 2007

D. CONTRACT DURATION: January 1, 2008 - December 31, 2019

E. CONTRACT AMENDMENTS: Amendment No. 1, effective July 1, 2008

amending base quantity and modifying diesel fuel adjustment to include explosives. Amendment No. 2, effective December 22, 2009

amending term, base quantity, price and

environmental force majeure.

Amendment No. 3, effective October 29, 2013 amending term, base quantity, price and payment. Assignment and Assumption Agreement dated August 6, 2015 assigning Agreement from

Armstrong Coal Company, Inc. to Armstrong Coal

Sales, LLC.

F. ANNUAL TONNAGE 2008 600,000 tons REQUIREMENTS: 2009 2,200,000 tons

2010 1,800,000 tons

2011 through 2013 - 2,100,000 tons per year 2014 through 2016 - 1,000,000 tons per year 2017 through 2019 - 700,000 tons per year

G. ACTUAL TONNAGE: <u>LG&E</u> <u>KU</u> RECEIVED: 2008 511.414 tons

2008	511,414 tons	82,623 tons
2009	1,530,482 tons	632,077 tons
2010	1,180,206 tons	657,930 tons
2011	993,296 tons	877,219 tons
2012	904,254 tons	1,211,495 tons
2013	838,589 tons	1,431,403 tons
2014	346,954 tons	634,044 tons

Attachment to Response to Question No. 15 Page 7 of 23 Billiter

	2015 2016	LG&E 312,387 tons 309,479 tons (through 10/31/16)	<u>KU</u> 627,074 tons 559,231 tons
H. PERCENT OF ANNUAL	2008	99%	
REQUIREMENTS:	2009	98%	
	2010	102%	
	2011	89%	
	2012	101%	
	2013	108%	
	2014	98%	
	2015	94%	
	2016	87% (through 10/31	/16)
I. BASE PRICE (FOB Railcar/Barge)	2008	Quality 1 - \$27.31 pe Quality 2 - \$28.30 pe	
	2009	Quality 1 - \$27.60 pe	r ton
	2007	Quality 1 - \$27.00 pc Quality 2 - \$28.76 pe	
		Quanty 2 \ \psi_20.70 \ \text{pc}	i ton
	2010	Quality 1 - \$28.18 pe	r ton
		Quality 2 – N/A	
	2011	Quality 1 - \$28.19 pe	r ton
		Quality 2 - \$29.61 pe	r ton
	2012	Quality 1 - \$28.35 pe	
		Quality 2 - \$29.77 pe	r ton
	2012	O1'4 1	
	2013	Quality 1 - \$28.35 pe	
		Quality 2 - \$29.77 pe	rton
	2014-2017	Quality 1 - \$28.50 pe	r ton
	2014 2017	Quality 2 - \$29.92 pe	
		Quality 2 \ \psi_2).92 pc	i ton
	2018	Quality 1 - \$29.00 pe	r ton
		Quality 2 - \$30.42 pe	
	2019	Quality 1 - \$30.25 pe	r ton
		Quality 2 - \$31.67 pe	r ton

Attachment to Response to Question No.15 Page 8 of 23 Billiter

-\$0.98 per ton J. ESCALATIONS TO DATE:

Quality 1 - \$27.52 per ton Quality 2 - \$28.94 per ton K. CURRENT CONTRACT PRICE:

Attachment to Response to Question No. 15 Page 9 of 23 Billiter

A. NAME/ADDRESS: Armstrong Coal Sales, LLC / J14004

407 Brown Road

Madisonville, Kentucky 42431

B. PRODUCTION FACILITY:

OPERATOR Armstrong Coal Company, Inc.

MINES Various

LOCATION Muhlenberg County and Ohio County,

Kentucky

C. CONTRACT EXECUTED DATE: December 12, 2012

D. CONTRACT DURATION: January 1, 2013 - December 31, 2017

E. CONTRACT AMENDMENTS: Amendment No. 1, effective October 29, 2013

amending base quantity and price.

Assignment and Assumption Agreement dated August 6, 2015 assigning Agreement from

Armstrong Coal Company, Inc. to Armstrong Coal

Sales, LLC.

F. ANNUAL TONNAGE 2014 1,300,000 tons REQUIREMENTS: 2015 1,350,000 tons 2016 500,000 tons 2017 500,000 tons

G. ACTUAL TONNAGE: <u>LG&E</u> <u>KU</u>

RECEIVED: 2014 647,205 tons 579,440 tons 2015 323,703 tons 861,959 tons 2016 279,420 tons 318,086 tons

(through 10/31/16)

H. PERCENT OF ANNUAL 2014 94% REQUIREMENTS: 2015 88%

2016 120% (through 10/31/16)

I. BASE PRICE (FOB Railcar/Barge) <u>Railcar</u> <u>Barge</u>

2014	\$44.60 per ton	\$45.60 per ton
2015	\$46.01 per ton	\$47.01 per ton
2016	\$46.75 per ton	\$47.75 per ton
2017	\$47.90 per ton	\$48.90 per ton

Attachment to Response to Question No. 15 Page 10 of 23 Billiter

J. ESCALATIONS TO DATE: <u>Railcar/Barge</u>

-\$5.47 per ton

K. CURRENT CONTRACT PRICE: <u>Railcar</u> <u>Barge</u>

\$41.28 per ton \$42.28 per ton

Attachment to Response to Question No.15 Page 11 of 23 Billiter

A. NAME/ADDRESS: Armstrong Coal Sales, LLC / J14010

407 Brown Road

Madisonville, Kentucky 42431

B. PRODUCTION FACILITY:

OPERATOR Armstrong Coal Company, Inc.

MINES Various

LOCATION Muhlenberg County and Ohio County,

Kentucky

C. CONTRACT EXECUTED DATE: December 12, 2012

D. CONTRACT DURATION: January 1, 2014 - December 31, 2019

E. CONTRACT AMENDMENTS: Assignment and Assumption Agreement dated

August 6, 2015 assigning Agreement from

Armstrong Coal Company, Inc. to Armstrong Coal

Sales, LLC.

F. ANNUAL TONNAGE 2014 100,000 tons

REQUIREMENTS: 2015 100,000 tons

2016 100,000 tons 2017 100,000 tons 2018 100,000 tons 2019 100,000 tons

G. ACTUAL TONNAGE: LG&E KU

RECEIVED: 2014 38,628 tons 59,303 tons

2015 28,826 tons 75,097 tons 2016 14,332 tons 64,070 tons

(through 10/31/16)

H. PERCENT OF ANNUAL 2014 98%

REQUIREMENTS: 2015 104%

2016 78% (through 10/31/16)

I. BASE PRICE (FOB Barge/Railcar) 2014 \$40.00 per ton

2015 \$41.00 per ton 2016 \$42.00 per ton

2017 \$43.00 per ton

2018 \$44.00 per ton

2019 \$45.00 per ton

Attachment to Response to Question No.15 Page 12 of 23 Billiter

J. ESCALATIONS TO DATE: None

K. CURRENT CONTRACT PRICE: \$42.00 per ton

Attachment to Response to Question No. 15 Page 13 of 23 Billiter

A. NAME/ADDRESS: Armstrong Coal Sales, LLC / J16003

407 Brown Road

Madisonville, Kentucky 42431

B. PRODUCTION FACILITY:

OPERATOR Armstrong Coal Company, Inc.

MINES Various

LOCATION Muhlenberg County and Ohio County,

Kentucky

C. CONTRACT EXECUTED DATE: September 8, 2014

D. CONTRACT DURATION: January 1, 2016 - December 31, 2017

E. CONTRACT AMENDMENTS: Assignment and Assumption Agreement dated

August 6, 2015 assigning Agreement from

Armstrong Coal Company, Inc. to Armstrong Coal

Sales, LLC.

F. ANNUAL TONNAGE 2016 1,000,000 tons REQUIREMENTS: 2017 1,000,000 tons

G. ACTUAL TONNAGE: LG&E KU

RECEIVED: 2016 329,788 tons 452,771 tons

(through 10/31/16)

H. PERCENT OF ANNUAL 2016 78% (through 10/31/16)

REQUIREMENTS:

I. BASE PRICE (FOB Barge/Railcar) 2016 \$42.80 per ton

2017 \$44.00 per ton

J. ESCALATIONS TO DATE: -\$5.54 per ton

K. CURRENT CONTRACT PRICE: \$37.26 per ton

Attachment to Response to Question No.15 Page 14 of 23 Billiter

A. NAME/ADDRESS: Armstrong Coal Sales, LLC / J16017

407 Brown Road

Madisonville, Kentucky 42431

B. PRODUCTION FACILITY:

OPERATOR Armstrong Coal Company, Inc.

MINES Various

LOCATION Muhlenberg County and Ohio County,

Kentucky

C. CONTRACT EXECUTED DATE: September 16, 2015

D. CONTRACT DURATION: September 1, 2015 - December 31, 2018

E. CONTRACT AMENDMENTS: None

F. ANNUAL TONNAGE 2016 400,000 tons REQUIREMENTS: 2017 720,000 tons

2018 1,000,000 tons

G. ACTUAL TONNAGE: LG&E KU

RECEIVED: 2016 69,982 tons 236,975 tons

(through 10/31/16)

H. PERCENT OF ANNUAL 2016 77% (through 10/31/16)

REQUIREMENTS:

I. BASE PRICE (FOB Railcar/Barge) Railcar Barge

 2016
 \$38.25 per ton
 \$39.25 per ton

 2017
 \$39.25 per ton
 \$40.25 per ton

 2018
 \$40.25 per ton
 \$41.25 per ton

J. ESCALATIONS TO DATE: Railcar/Barge

-\$2.61 per ton

K. CURRENT CONTRACT PRICE: Railcar Barge

\$35.64 per ton \$36.64 per ton

Attachment to Response to Question No.15 Page 15 of 23 Billiter

A. NAME/ADDRESS:

Bowie Refined Coal LLC / K14037
6100 Dutchmans Lane, 11th Floor
Louisville, Kentucky 40205

B. PRODUCTION FACILITY:

OPERATOR

MINES

Bowie Refined Coal LLC

BRC Estill County Facility

LOCATION

Estill County, Kentucky

C. CONTRACT EXECUTED DATE: October 6, 2014

D. CONTRACT DURATION: October 1, 2014 - December 31, 2016

E. CONTRACT AMENDMENTS: None

F. ANNUAL TONNAGE 2014 30,000 tons REQUIREMENTS: 2015 120,000 tons 2016 120,000 tons

G. ACTUAL TONNAGE: <u>KU</u>

RECEIVED: 2014 12,672 tons 2015 99,611 tons

2016 39,633 tons (through 10/31/16)

H. PERCENT OF ANNUAL 2014 42% REQUIREMENTS: 2015 83%

2016 33% (through 10/31/16)

I. BASE PRICE (FOB E.W. Brown) 120,000 lbs. GVW 80,000 lbs. GVW

 2014
 \$58.50 per ton
 \$69.50 per ton

 2015
 \$59.67 per ton
 \$70.67 per ton

 2016
 \$60.84 per ton
 \$71.84 per ton

J. ESCALATIONS TO DATE: None

K. CURRENT CONTRACT PRICE: 120,000 lbs. GVW 80,000 lbs. GVW

\$60.84 per ton \$71.84 per ton

Attachment to Response to Question No.15 Page 16 of 23 Billiter

A. NAME/ADDRESS: Eagle River Coal, LLC / J16005

29 West Raymond St. Harrisburg, Illinois 62946

B. PRODUCTION FACILITY:

OPERATOR Eagle River Coal, LLC

MINES Eagle River Surface Mine No.1

LOCATION Saline County, Illinois

C. CONTRACT EXECUTED DATE: November 11, 2014

D. CONTRACT DURATION: January 1, 2016 - December 31, 2018

E. CONTRACT AMENDMENTS: None

F. ANNUAL TONNAGE 2016 300,000 tons REQUIREMENTS: 2017 420,000 tons 2018 420,000 tons

G. ACTUAL TONNAGE: LG&E KU

RECEIVED: 2016 98,204 tons 128,137 tons

(through 10/31/16)

H. PERCENT OF ANNUAL 2016 75% (through 10/31/16)

REQUIREMENTS:

I. BASE PRICE (FOB Barge) 2016 \$48.20 per ton

2017 \$49.30 per ton 2018 \$52.30 per ton

J. ESCALATIONS TO DATE: -\$3.75 per ton

K. CURRENT CONTRACT PRICE: \$44.45 per ton

A. NAME/ADDRESS: Foresight Coal Sales, LLC / J16018

46226 National Road St. Clairsville, Ohio 43950

B. PRODUCTION FACILITY:

OPERATOR: Macoupin Energy, LLC

Sugar Camp Energy, LLC Hillsboro Energy, LLC Williamson Energy, LLC

MINES: Shay Mine No. 1

Deer Run Mine

MC#1 Mach #1

LOCATION: Macoupin, Montgomery, Williamson and Franklin

Counties, Illinois

C. CONTRACT EXECUTED DATE: December 19, 2015

D. CONTRACT DURATION: December 1, 2015 - December 31, 2019

E. CONTRACT AMENDMENTS: None

F. ANNUAL TONNAGE Total 3,000,000 tons

REQUIREMENTS Year Volume Range

2016 0 - 500,000 tons 2017 1,000,000 - 1,500,000 tons 2018 1,000,000 - 1,500,000 tons

2019 0 - 1.000,000 tons

G. ACTUAL TONNAGE: <u>KU</u> <u>LGE</u>

RECEIVED: 2016 0 tons 0 tons

H. PERCENT OF ANNUAL

REQUIREMENTS: 2016 NA

I. BASE PRICE: (FOB Barge) <u>Volume Range (Cumulative)</u> <u>Base Price</u>

0 - 1,000,000 tons \$38.95 per ton 1,000,001 - 2,000,000 tons \$40.45 per ton 2,000,001 - 3,000,000 tons \$42.35 per ton

J. ESCALATIONS TO DATE: None

K. CURRENT CONTRACT PRICE: \$38.95 per ton

Attachment to Response to Question No.15 Page 18 of 23 Billiter

A. NAME/ADDRESS: Peabody COALSALES, LLC / J16007

701 Market Street

St. Louis, Missouri 63101

B. PRODUCTION FACILITY:

OPERATOR Peabody Midwest Mining, LLC

Peabody Wild Boar Mining, LLC

MINE Somerville Mine Complex

Wild Boar

LOCATION Warrick & Gibson Counties, Indiana

C. CONTRACT EXECUTED DATE: April 6, 2015

D. CONTRACT DURATION: April 1, 2015 – December 31, 2018

E. CONTRACT AMENDMENTS: Amendment No. 1 effective September 1, 2015

Extend term to December 31, 2018 and add 250K tons to 2016, 750K tons to 2017 and 750K tons to 2018. Added new pricing for 2016 through 2018.

F. ANNUAL TONNAGE 2016 750,000 tons REQUIREMENTS: 2017 750,000 tons

2017 750,000 tons 2018 750,000 tons

G. ACTUAL TONNAGE KU LGE

RECEIVED: 2016 596,700 tons 17,804 tons

(through 10/31/2016)

H. PERCENT OF ANNUAL 2016 82% (through 10/31/2016)

REQUIREMENTS:

I. BASE PRICE: (FOB Barge/Railcar) 2016 1st 500,000 tons

\$45.75 per ton – FOB Barge Evansville \$45.75 per ton – FOB Barge Warrick Co.

\$42.75 per ton – FOB Railcar

2016 Last 250,000 tons

\$40.75 per ton – FOB Barge Evansville \$40.75 per ton – FOB Barge Warrick Co.

\$37.75 per ton – FOB Railcar

Attachment to Response to Question No. 15 Page 19 of 23 Billiter

2017 \$41.75 per ton – FOB Barge Evansville \$41.75 per ton – FOB Barge Warrick Co.

\$38.75 per ton – FOB Railcar

2018 \$42.75 per ton – FOB Barge Evansville \$42.75 per ton – FOB Barge Warrick Co.

\$39.75 per ton – FOB Railcar

J. ESCALATIONS TO DATE: 2016 1st 500,000 tons

-\$8.42 per ton – FOB Barge Evansville -\$7.49 per ton – FOB Barge Warrick Co.

-\$7.49 per ton – FOB Railcar

2016 Last 250,000 tons

-\$2.48 per ton – FOB Barge Evansville -\$2.26 per ton – FOB Barge Warrick Co.

-\$2.26 per ton – FOB Railcar

K. CURRENT CONTRACT PRICE: 2016 Last 250,000 tons

\$38.27 per ton – FOB Barge Evansville \$38.49 per ton – FOB Barge Warrick Co.

\$35.49 per ton – FOB Railcar

Attachment to Response to Question No.15 Page 20 of 23 Billiter

A. NAME/ADDRESS: Rhino Energy LLC and Pennyrile Energy LLC /

J14001

424 Lewis Hargett Circle, Suite 250

Lexington, Kentucky 40503

B. PRODUCTION FACILITY:

OPERATOR Pennyrile Energy LLC

MINE Riveredge Mine

LOCATION Mclean County, Kentucky

C. CONTRACT EXECUTED DATE: December 11, 2012

D. CONTRACT DURATION: December 10, 2014 - December 31, 2020

E. CONTRACT AMENDMENTS: None

F. ANNUAL TONNAGE 2014 150,000 tons REQUIREMENTS: 2015 800,000 tons

2016 800,000 tons 2017 800,000 tons 2018 – 2020 re-opener

G. ACTUAL TONNAGE <u>LG&E</u> <u>KU</u>

RECEIVED: 2014 43,582 tons 70,647 tons 2015 121,084 tons 580,770 tons

2016 62,122 tons 642,673 tons

(through 10/31/16)

H. PERCENT OF ANNUAL 2014 76% REQUIREMENTS: 2015 88%

2016 88% (through 10/31/16)

I. BASE PRICE (FOB Barge): 2014 \$45.25 per ton

2015 \$46.50 per ton 2016 \$48.25 per ton 2017 \$50.00 per ton 2018 – 2020 re-opener

J. ESCALATIONS TO DATE: None

K. CURRENT CONTRACT PRICE: \$48.25 per ton

A. NAME/ADDRESS: The American Coal Company / J16006

46226 National Road St. Clairsville, Ohio 43950

B. PRODUCTION FACILITY:

OPERATOR: The American Coal Company

MINES: New Era Mine and New Future Mine

LOCATION: Saline County, Illinois

C. CONTRACT EXECUTED DATE: December 19, 2015

D. CONTRACT DURATION: December 1, 2014 - December 31, 2019

E. CONTRACT AMENDMENTS: Amendment No.1 effective January 1, 2016, change

FOB Barge Loading Point to Sitran Dock MP 817.5

Ohio River.

Amendment No. 2 effective September 1, 2016,

reduce FOB Barge Price.

F. ANNUAL TONNAGE Total 3,000,000 tons

REQUIREMENTS Year Volume Range

0 - 500,000 tons

2017 1,000,000 – 1,500,000 tons 2018 1,000,000 – 1,500,000 tons

2019 0 – 1,000,000 tons

G. ACTUAL TONNAGE: <u>KU</u> <u>LGE</u>

RECEIVED: 2016 0 tons 0 tons

H. PERCENT OF ANNUAL

REQUIREMENTS: 2016 NA

I. BASE PRICE: (FOB Barge) <u>Volume Range (Cumulative)</u> <u>Base Price</u>

0-500,000 tons \$43.50 per ton 500,001-1,000,000 tons \$44.00 per ton 1,000,001-1,500,000 tons \$44.75 per ton 1,500,001-2,000,000 tons \$45.50 per ton 2,000,001-2,500,000 tons \$46.50 per ton 2,500,001-3,000,000 tons \$47.00 per ton

J. ESCALATIONS TO DATE: None

Attachment to Response to Question No. 15 Page 22 of 23 Billiter

K. CURRENT CONTRACT PRICE: \$43.50 per ton

A. NAME/ADDRESS: Triad Mining, LLC / J15002

3228 Summit Square Place, Suite 180

Lexington, Kentucky 40509

B. PRODUCTION FACILITY:

OPERATOR: Triad Mining, LLC

MINES: Log Creek

LOCATION: Pike County, Indiana

C. CONTRACT EXECUTED DATE: January 23, 2015

D. CONTRACT DURATION: January 1, 2015 - December 30, 2017

E. CONTRACT AMENDMENTS: None

F. ANNUAL TONNAGE 2015 360,000 tons REQUIREMENTS: 2016 500,000 tons

2017 500,000 tons

G. ACTUAL TONNAGE: <u>KU</u>

RECEIVED: 2015 362,200 tons 2016 431,521 tons

(through 10/31/16)

H. PERCENT OF ANNUAL

REQUIREMENTS: 2015 101%

2016 86% (through 10/31/16)

I. BASE PRICE: (FOB Railcar) 2015 \$44.00 per ton

2016 \$46.00 per ton 2017 \$47.50 per ton

J. ESCALATIONS TO DATE: -\$3.34 per ton

K. CURRENT CONTRACT PRICE: \$42.66 per ton

KENTUCKY UTILITIES COMPANY

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 16

Witness: Derek Rahn

Q-16. 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-16. See attached.

Kentucky Utilities Revised Tariffs

Tariff Sheet No.	Rate Schedule	g Base Rate gy, Fuel and ECR	Existing Fuel Component of Base Rates	Rate -	sting Base Excluding uel Base	Con	vised Fuel nponent of ase Rates	Rate	vised Base s including I and ECR
5	RS	\$ 0.08870	\$ 0.02892	\$	0.05978	\$	0.02609	\$	0.08587
6	RTOD-Energy								
	Off Peak	\$ 0.05740	\$ 0.02892	\$	0.02848	\$	0.02609	\$	0.05457
	On Peak	\$ 0.27646	\$ 0.02892	\$	0.24754	\$	0.02609	\$	0.27363
6.1	RTOD - Demand	\$ 0.04370	\$ 0.02892	\$	0.01478	\$	0.02609	\$	0.04087
7	VFD	0.08870	0.02892		0.05978		0.02609		0.08587
10	GS	0.10426	0.02892		0.07534		0.02609		0.10143
12	AES	0.08369	0.02892		0.05477		0.02609		0.08086
15	PS								
	Secondary	0.03572	0.02892		0.00680		0.02609		0.03289
	Primary	0.03446	0.02892		0.00554		0.02609		0.03163
20	TODS	0.03527	0.02892		0.00635		0.02609		0.03244
22	TODP	0.03432	0.02892		0.00540		0.02609		0.03149
25	RTS	0.03357	0.02892		0.00465		0.02609		0.03074
30	FLS								
	Primary	0.03643	0.02892		0.00751		0.02609		0.03360
	Transmission	0.03344	0.02892		0.00452		0.02609		0.03061
37	LE	0.07328	0.02892		0.04436		0.02609		0.07045
38	TE	0.08740	0.02892		0.05848		0.02609		0.08457

LIGHTING SCHEDULES; ALL RATES PER UNIT PER MONTH

				Fuel Factor	Annual Increase	Monthly		
Page	Schedule		Kwh per year	Increase \$/kWh (0.00283)	per year	Increase	Ta Existing	riff Revised
35	LS Lighting Service							
	Overhead Service							
	_							
	Rate Code Type of Fixture	Approximate e Lumens	kW Per Light					
	High Pressure Sodium							
	462 Cobra Head	5,800	0.083	332 kWh/year	(0.94)	(0.08)		\$ 9.78
	472 Cobra Head 463 Cobra Head	5,800	0.083	332 kWh/year	(0.94)	(0.08)	13.04	12.96
	473 Cobra Head	9,500 9,500	0.117 0.117	468 kWh/year 468 kWh/year	(1.32) (1.32)	(0.11)	10.28 13.70	10.17 13.59
	464 Cobra Head	22,000	0.242	968 kWh/year	(2.74)	(0.23)	16.08	15.85
	474 Cobra Head	22,000	0.242	968 kWh/year	(2.74)	(0.23)	19.50	19.27
	465 Cobra Head	50,000	0.471	1,884 kWh/year	(5.33)	(0.44)	25.61	25.17
	475 Cobra Head	50,000	0.471	1,884 kWh/year	(5.33)	(0.44)	27.37	26.93
	487 Directional	9,500	0.117	468 kWh/year	(1.32)	(0.11)	10.13	10.02
	488 Directional	22,000	0.242	968 kWh/year	(2.74)	(0.23)	15.42	15.19
	489 Directional	50,000	0.471	1,884 kWh/year	(5.33)	(0.44)	21.95	21.51
	428 Open Bottom	9,500	0.117	468 kWh/year	(1.32)	(0.11)	8.87	8.76
	Metal Halide							
	450 Directional	12,000	0.150	600 kWh/year	(1.70)	(0.14)	16.13	15.99
	451 Directional 452 Directional	32,000 107,800	0.350 1.080	1,400 kWh/year 4,320 kWh/year	(3.96) (12.23)	(0.33) (1.02)	22.80 47.70	22.47 46.68
		107,000	1.000	4,520 KWII year	(12.23)	(1.02)	47.70	40.00
35.1	LS Lighting Service							
	Underground Service							
	Rate	Approximate	IWD I'l					
	Code Type of Fixtur High Pressure Sodium	e Lumens	kW Per Light					
	467 Colonial	5,800	0.083	332 kWh/year	(0.94)	(0.08)	\$ 12.14	\$ 12.06
	468 Colonial	9,500	0.117	468 kWh/year	(1.32)	(0.11)	12.46	12.35
	401 Acorn	5,800	0.083	332 kWh/year	(0.94)	(0.08)	16.57	16.49
	411 Acorn	5,800	0.083	332 kWh/year	(0.94)	(0.08)	23.63	23.55
	420 Acorn	9,500	0.117	468 kWh/year	(1.32)	(0.11)	17.01	16.90
	430 Acom	9,500	0.117	468 kWh/year	(1.32)	(0.11)	24.20	24.09
	414 Victorian	5,800	0.083	332 kWh/year	(0.94)	(0.08)	33.87	33.79
	415 Victorian	9,500	0.117	468 kWh/year	(1.32)	(0.11)	34.19	34.08
	492 Contemporary	5,800	0.083	332 kWh/year	(0.94)	(0.08)	17.12	17.04
	476 Contemporary	5,800	0.083	332 kWh/year	(0.94)	(0.08)	18.66	18.58
	497 Contemporary	9,500	0.117	468 kWh/year	(1.32)	(0.11)	17.00	16.89
	477 Contemporary	9,500	0.117	468 kWh/year	(1.32)	(0.11)	23.09	22.98
	498 Contemporary 478 Contemporary		0.242 0.242	968 kWh/year 968 kWh/year	(2.74) (2.74)	(0.23)	19.84 29.73	19.61 29.50
	478 Contemporary 499 Contemporary	50,000	0.242	1,884 kWh/year	(5.33)	(0.23)	24.15	23.71
	479 Contemporary		0.471	1,884 kWh/year	(5.33)	(0.44)	36.74	36.30
	300 Dark Sky	4,000	0.060	240 kWh/year	(0.68)	(0.06)	\$ 24.72	\$ 24.66
	301 Dark Sky	9,500	0.117	468 kWh/year	(1.32)	(0.11)	25.83	25.72
35.2	LS Lighting Service							
	Underground Service							
	Rate	Approximate						
	Code Type of Fixtur	e Lumens	kW Per Light					
	Metal Halide	12 000	0.150	600 1-337- /	(1.70)	(0.14)	17 45	17 21
	490 Contemporary 494 Contemporary	12,000 12,000	0.150 0.150	600 kWh/year 600 kWh/year	(1.70) (1.70)	(0.14) (0.14)	17.45 31.42	17.31 31.28
	491 Contemporary	32,000	0.350	1,400 kWh/year	(3.96)	(0.33)	24.68	24.35
	495 Contemporary		0.350	1,400 kWh/year	(3.96)	(0.33)	38.64	38.31
	493 Contemporary		1.080	4,320 kWh/year	(12.23)	(1.02)	51.32	50.30
	496 Contemporary	107,800	1.080	4,320 kWh/year	(12.23)	(1.02)	65.28	64.26

LIGHTING SCHEDULES; ALL RATES PER UNIT PER MONTH

				Kwh per	Fuel Factor Increase \$/kWh	Annual Increase per year	Monthly Increase	Ta	riff
Page	Schedule			year	(0.00283)			Existing	Revised
36	RLS Restric	cted Lighting Service							
	Overhead	Service							
	Rate		Approximate						
		Type of Fixture sure Sodium	Lumens	kW Per Light					
		Cobra Head	4,000	0.060	240 kWh/year	(0.68)	(0.06)	8.53	8.47
		Cobra Head	4,000	0.060	240 kWh/year	(0.68)	(0.06)	11.73	11.67
	409	Cobra Head	50,000	0.471	1,884 kWh/year	(5.33)	(0.44)	13.56	13.12
	426	Open Bottom	5,800	0.083	332 kWh/year	(0.94)	(0.08)	8.54	8.46
	Metal Hali	de							
		Directional	12,000	0.150	600 kWh/year	(1.70)	(0.14)		\$ 20.75
		Directional	32,000	0.350	1,400 kWh/year	(3.96)	(0.33)	27.56	27.23
	459	Directional	107,800	1.080	4,320 kWh/year	(12.23)	(1.02)	52.45	51.43
	Mercury V	apor							
	446	Directional	7,000	0.207	828 kWh/year	(2.34)	(0.20)	\$ 10.77	\$ 10.57
	456	Directional	7,000	0.207	828 kWh/year	(2.34)	(0.20)	13.27	13.07
	447	Directional	10,000	0.294	1,176 kWh/year	(3.33)	(0.28)	12.77	12.49
	457	Directional	10,000	0.294	1,176 kWh/year	(3.33)	(0.28)	14.98	14.70
		Directional	20,000	0.453	1,812 kWh/year	(5.13)	(0.43)	14.45	14.02
	458	Directional	20,000	0.453	1,812 kWh/year	(5.13)	(0.43)	16.91	16.48
	404	Open Bottom	7,000	0.207	828 kWh/year	(2.34)	(0.20)	11.87	11.67
36.1	RLS Restric	cted Lighting Service							
	Overhead :	Service (continued)							
	Rate		Approximate						
	Code	Type of Fixture	Lumens	kW Per Light					
	Incandesce	ent							
	421	Tear Drop	1,000	0.102	408 kWh/year	(1.15)	(0.10)	3.81	3.71
	422	Tear Drop	2,500	0.201	804 kWh/year	(2.28)	(0.19)	5.11	4.92
	424	Tear Drop	4,000	0.327	1,308 kWh/year	(3.70)	(0.31)	7.63	7.32
	434	Tear Drop	4,000	0.327	1,308 kWh/year	(3.70)	(0.31)	8.67	8.36
	425	Tear Drop	6,000	0.447	1,788 kWh/year	(5.06)	(0.42)	10.19	9.77
	Undergrou	and Service							
	Rate		Approximate						
		Type of Fixture	Lumens	kW Per Light					
	Metal Hali	* *		C					
	460	Directional	12,000	0.150	600 kWh/year	(1.70)	(0.14)	30.10	29.96
	469	Directional	32,000	0.350	1,400 kWh/year	(3.96)	(0.33)	36.77	36.44
	470	Directional	107,800	1.080	4,320 kWh/year	(12.23)	(1.02)	61.66	60.64
	High Press	sure Sodium							
	-	Acorn	4,000	0.060	240 kWh/year	(0.68)	(0.06)	15.11	15.05
		Acorn	4,000	0.060	240 kWh/year	(0.68)	(0.06)	22.31	22.25
	466	Colonial	4,000	0.060	240 kWh/year	(0.68)	(0.06)	10.79	10.73
	412	Coach	5,800	0.083	332 kWh/year	(0.94)	(0.08)	33.87	33.79
		Coach	9,500	0.083	468 kWh/year	(1.32)	(0.08)	34.19	34.08
					•				
	360	Granville	16,000	0.181	724 kWh/year	(2.05)	(0.17)	62.30	62.13

KENTUCKY UTILITIES COMPANY

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 17

Witness: Derek Rahn

- Q-17. Provide a statement showing by cross-outs and italicized inserts all proposed changes in rates. A copy of the current tariff may be used.
- A-17. See attached.

P.S.C. No. 17, First Revision of Original Sheet No. 5 Canceling P.S.C. No. 17, 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: \$10.75 per month

Plus an Energy Charge of: \$0.08587, per kWh

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
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: December 16, 2015

DATE EFFECTIVE: February 1, 2016

ISSUED BY: /s/ Edwin R. Staton, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2015-00221 dated December 7, 2015

P.S.C. No. 17, First Revision of Original Sheet No. 6 Canceling P.S.C. No. 17, 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: \$10.75 per month

Plus an Energy Charge:

 Off Peak Hours:
 \$0.05457, per kWh

 On Peak Hours:
 \$0.027363, per kWh

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
Franchise Fee Rider	Sheet No. 90
School Tax	Sheet No. 91
Home Energy Assistance Program	Sheet No. 92

DATE OF ISSUE: December 16, 2015

DATE EFFECTIVE: February 1, 2016

ISSUED BY: /s/ Edwin R. Staton, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2015-00221 dated December 7, 2015

Deleted: 0.05740

P.S.C. No. 17, First Revision of Original Sheet No. 7 Canceling P.S.C. No. 17, 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: \$10.75 per month

Plus an Energy Charge: \$0.04087_per kWh

Plus a Demand Charge:

Off Peak Hours: \$ 3.70 per kW
On Peak Hours: \$13.05 per kW

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
Franchise Fee Rider	Sheet No. 90
School Tax	Sheet No. 91
Home Energy Assistance Program	Sheet No. 92

DATE OF ISSUE: December 16, 2015

DATE EFFECTIVE: February 1, 2016

ISSUED BY: /s/ Edwin R. Staton, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2015-00221 dated December 7, 2015

P.S.C. No. 17, First Revision of Original Sheet No. 9 Canceling P.S.C. No. 17, Original Sheet No. 9

Standard Rate

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: \$10.75 per month

Plus an Energy Charge of: \$0.08587, per kWh

ADJUSTMENT CLAUSES

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

Fuel Adjustment Clause
Off-System Sales Adjustment Clause
Demand-Side Management Cost Recovery Mechanism
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.

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/s/ Edwin R. Staton, Vice President State Regulation and Rates Lexington, Kentucky

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P.S.C. No. 17, First Revision of Original Sheet No. 10 Canceling P.S.C. No. 17, 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: \$25.00 per month for single-phase service

\$40.00 per month for three-phase service

Plus an Energy Charge of: \$ 0.10143, per kWh

ADJUSTMENT CLAUSES

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

Fuel Adjustment Clause
Off-System Sales Adjustment Clause
Demand-Side Management Cost Recovery Mechanism
Environmental Cost Recovery Surcharge
Franchise Fee Rider
School Tax
Sheet No. 97
School Tax
Sheet No. 90
Sheet No. 91

DETERMINATION OF MAXIMUM LOAD

If Company determines based on Customer's usage history that Customer may be exceeding the maximum load permitted under Rate GS, Company may, at its discretion, equip Customer with a meter capable of measuring demand to determine Customer's continuing eligibility for Rate GS. If Customer is equipped with a demand-measuring meter, Customer's load will be measured and will be the average kW demand delivered to the customer during the 15-minute period of maximum use during the month.

MINIMUM CHARGE

The Basic Service Charge shall be the minimum charge.

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State Regulation and Rates Lexington, Kentucky

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P.S.C. No. 17, First Revision of Original Sheet No. 12 Canceling P.S.C. No. 17, 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: \$25.00 per meter per month for single-phase service

\$40.00 per meter per month for three-phase service

Plus an Energy Charge of: \$ 0.08086, per kWh

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P.S.C. No. 17, First Revision of Original Sheet No. 15 Canceling P.S.C. No. 17, 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

Secondary Primary Basic Service Charge per month: \$90.00 \$200.00 Plus an Energy Charge per kWh of: \$ 0.03289 \$ 0.03163 Plus a Demand Charge per kW of: Summer Rate: (Five Billing Periods of May through September) \$19.05 \$ 19.51 Winter Rate: (All other months) \$16.95 \$ 17.41

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
- a minimum of 50% of the highest billing demand in the preceding eleven (11) monthly billing periods, or
- 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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P.S.C. No. 17, First Revision of Original Sheet No. 20 Canceling P.S.C. No. 17, 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 12-month-average monthly maximum loads do not exceed 5,000 kW.

RATE

Basic Service Charge per month: \$200.00

Plus an Energy Charge per kWh of: \$ 0.03244

Plus a Maximum Load Charge per kW of:

Peak Demand Period\$ 6.13Intermediate Demand Period\$ 4.53Base Demand Period\$ 5.20

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 billing demand 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
- b) a minimum of 75% of the highest billing demand in the preceding eleven (11) monthly billing periods, or
- c) a minimum of 75% of 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
Franchise Fee Rider	Sheet No. 90
School Tax	Sheet No. 91

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P.S.C. No. 17, First Revision of Original Sheet No. 22 Canceling P.S.C. No. 17, 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: \$300.00

Plus an Energy Charge per kWh of: \$ 0.03149

Plus a Maximum Load Charge per kVA of:

Peak Demand Period \$ 5.89
Intermediate Demand Period \$ 4.39
Base Demand Period \$ 3.34

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 billing demand 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
- a minimum of 75% of the highest billing demand in the preceding eleven (11) monthly billing periods, or
- a minimum of 75% of the contract capacity based on the maximum load expected on the system or on facilities specified by Customer.

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P.S.C. No. 17, First Revision of Original Sheet No. 25 Canceling P.S.C. No. 17, 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: \$1,000.00

Plus an Energy Charge per kWh of: \$ 0.030

Plus a Maximum Load Charge per kVA of:

Peak Demand Period \$ 4.73 Intermediate Demand Period \$ 4.63 Base Demand Period \$ 3.10

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 billing demand 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
- a minimum of 75% of the highest billing demand in the preceding eleven (11) monthly billing periods, or
- a minimum of 75% of 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
Franchise Fee Rider	Sheet No. 90
School Tax	Sheet No. 91

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P.S.C. No. 17, First Revision of Original Sheet No. 30 Canceling P.S.C. No. 17, 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

	<u>Pri</u>	mary_	Trans	mission
Basic Service Charge per month:	\$1,0	00.00	\$1,0	00.00
Plus an Energy Charge per kWh of:	\$	0.03360,	\$	0.03061
Plus a Maximum Load Charge per kVA of: Peak Demand Period Intermediate Demand Period Base Demand Period	\$ \$ \$	3.01 2.12 2.17	\$ \$ \$	3.01 2.12 1.42

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 billing demand 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) a minimum of 75% of the highest billing demand in the preceding eleven (11) monthly billing periods, or
- c) a minimum of 75% of the contract capacity based on the maximum load expected on the system or on facilities specified by Customer.

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P.S.C. No. 17, First Revision of Original Sheet No. 35 Canceling P.S.C. No. 17, 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	eximate kW Per <u>Monthly Charc</u>		Charge	<u>qe</u>	
Code	Fixture	Lumens	Light	Fixture Only	Ornamental		
High Pressu	ure Sodium						
462/472	Cobra Head	5,800	0.083	\$ <u>9.78</u> ,	\$ <u>12.96</u> ,		
463/473	Cobra Head	9,500	0.117	10.17	13.59		
464/474	Cobra Head	22,000*	0.242	15.85	19.27		
465/475	Cobra Head	50,000*	0.471	25.17	26.93		
487	Directional	9,500	0.117	\$10.02			
488	Directional	22.000*	0.242	15.19		_	
489	Directional	50,000*	0.471	21.51			
428	Open Bottom	9,500	0.117	\$ <u>8.76</u> ,			
Metal Halide	-						
450	Directional	12,000*	0.150	\$ <u>15.99</u> ,			
451	Directional	32,000*	0.350	22.47			
452	Directional	107,800*	1.080	46.68			

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P.S.C. No. 17, First Revision of Original Sheet No. 35.1 Canceling P.S.C. No. 17, Original Sheet No. 35.1

Monthly Charge

Standard Rate

LS Lighting Service

OVERHEAD SERVICE (continued)

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

				IVIC	miling Charge		
Rate Code	Type of Fixture	Approximate Lumens	kW Per Light	Fixture Only	Decorative Smooth	Historic Fluted	
High Pressi	ure Sodium						
467	Colonial	5,800	0.083		\$ <u>12.06</u>		
468	Colonial	9,500	0.117		12.35		
401/411	Acorn	5,800	0.083		\$16.49,	\$23.55	
420/430	Acorn	9,500	0.117		16.90	24.09	$\overline{}$
414	Victorian	5,800	0.083			\$33.79	
415	Victorian	9,500	0.117			34.08	
492/476	Contemporary	5,800	0.083	\$17.04	\$18.58,		
497/477	Contemporary	9,500	0.117	16.89	22.98		
498/478	Contemporary	22,000*	0.242	19.61	29.50		
499/479	Contemporary	50,000*	0.471	23.71	36.30		=
300	Dark Sky	4,000	0.060		\$ <u>24.66</u> ,		1
301	Dark Sky	9,500	0.117		25.72		

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P.S.C. No. 17, First Revision of Original Sheet No. 35.2 Canceling P.S.C. No. 17, Original Sheet No. 35.2

Standard Rate LS
Lighting Service

				Monthly Charge		
Rate Code	Type of Fixture	Approximate Lumens	kW Per Light	Fixture Only	Decorative Smooth	Historic Fluted
Metal Halide						
490/494	Contemporary	12,000*	0.150	\$ <u>17.31</u> ,	\$ <u>31.28</u> ,	
491/495	Contemporary	32,000*	0.350	24.35	38.31	
493/496	Contemporary	107,800*	1.080	50.30	64.26	

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
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.

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P.S.C. No. 17, First Revision of Original Sheet No. 36 Canceling P.S.C. No. 17, 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.

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.

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					Month	ly Charge	
-	Rate Code	Type of Fixture	Approximate Lumens	kW Per Light	Fixture Only	Fixture and Pole	
Higl	h Pressur	e Sodium					
4	161/471	Cobra Head	4,000	0.060	\$ <u>8.47</u>	\$ <u>11.67</u>	
4	109	Cobra Head	50,000	0.471	13.12		
4	126	Open Bottom	5,800	0.083	8.46,		
Met	al Halide						
4	154	Directional	12,000	0.150		\$ <u>20.75</u> ,	
4	155	Directional	32,000	0.350		27.23,	
4	159	Directional	107,800	1.080		51.43	
Mer	cury Vap	or					
4	146/456	Cobra Head	7,000	0.207	\$ <u>10.57</u>	\$ <u>13.07</u>	
4	147/457	Cobra Head	10,000	0.294	12.49	14.70,	
4	148/458	Cobra Head	20,000	0.453	14.02	<u>16.48</u>	
4	104	Open Bottom	7,000	0.207	11.67,		

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Kentucky Utilities Company

P.S.C. No. 17, First Revision of Original Sheet No. 36.1 Canceling P.S.C. No. 17, Original Sheet No. 36.1

Standard Rate

RLS Restricted Lighting Service

OVERHEAD SERVICE (continued)

Incandescer	nt				
421	Tear Drop	1,000	0.102	\$ <u>3.71</u> ,	
422	Tear Drop	2,500	0.201	4.92	
424/434	Tear Drop	4,000	0.327	7.32	\$ <u>8.36</u> ,
425	Tear Drop	6,000	0.447	9.77	

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				M	Ionthly Charge	<u> </u>			
Rate Code	Type of Fixture	Approximate Lumens	kW Per Light	Wood Pole	Decorative Smooth	Historic Fluted			
Metal Halid	.e								
460	Directional	12,000	0.150		\$ <u>29.96</u> ,				Deleted: 30.10
469	Directional	32,000	0.350		36.44				
470	Directional	107,800	1.080		60.64				Deleted: 36.77
								$\overline{}$	Deleted: 61.66
High Press	ure Sodium							(Z Gletour o nico
440/410	Acorn	4,000	0.060		\$ <u>15.05</u> ,	\$ <u>22.25</u>	<	(Deleted: 15.11
466	Colonial	4,000	0.060		\$ <u>10.73</u> ,			\mathcal{A}	Deleted: 22.31
440	Oh	5.000	0.000					$\overline{}$	Deleted: 10.79
412	Coach	5,800	0.083		\$ <u>33.79</u> ,				Deleted: 33.87
413	Coach	9,500	0.117		34.08			}	Deleted: 55.07
								7	Deleted: 34.19

DATE OF ISSUE: December 16, 2015

DATE EFFECTIVE: February 1, 2016

ISSUED BY: /s/ Edwin R. Staton, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2015-00221 dated December 7, 2015

Deleted: 62.30

Kentucky Utilities Company

P.S.C. No. 17, First Revision of Original Sheet No. 36.2 Canceling P.S.C. No. 17, Original Sheet No. 36.2

Standard Rate

RLS Restricted Lighting Service

UNDERGROUND SERVICE (continued)

RATE			Monthly Charge				
Rate Code	Type of Fixture	Approximate Lumens	kW Per Light	Decorative Smooth	Historic Fluted		
360	Granville	16,000	0.181	\$ <u>62.13</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
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: December 16, 2015

DATE EFFECTIVE: February 1, 2016

ISSUED BY: /s/ Edwin R. Staton, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2015-00221 dated December 7, 2015

P.S.C. No. 17, First Revision of Original Sheet No. 37 Canceling P.S.C. No. 17, 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

\$0.07045, per kWh

ADJUSTMENT CLAUSES

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

Fuel Adjustment Clause

Off-System Sales Adjustment Clause

Environmental Cost Recovery Surcharge

Franchise Fee Rider

School Tax

Sheet No. 85

Sheet No. 87

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

- a) 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.
- b) 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: December 16, 2015 **DATE EFFECTIVE**: February 1, 2016

ISSUED BY: /s/ Edwin R. Staton, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2015-00221 dated December 7, 2015

P.S.C. No. 17, First Revision of Original Sheet No. 38 Canceling P.S.C. No. 17, 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, signals, cameras, or other traffic lights and electronic communication devices.

RATE

Basic Service Charge: \$4.00 per delivery per month

Plus an Energy Charge of: \$0.08457 per kWh

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
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: December 16, 2015 **DATE EFFECTIVE**: February 1, 2016

ISSUED BY: /s/ Edwin R. Staton, Vice President

State Regulation and Rates Lexington, Kentucky

Issued by Authority of an Order of the Public Service Commission in Case No. 2015-00221 dated December 7, 2015

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 18

Witness: Delbert Billiter

- Q-18. a. State whether KU regularly compares the price of its coal purchases with those paid by other electric utilities.
 - b. If yes, state:
 - (1) How KU's prices compare with those of other utilities. If the comparison includes months outside of the review period, a comparison limited to the review period should be provided separately. Provide a copy of the source documents and calculations used to support the amounts used in the comparison and include all prices used in the comparison in cents per MMBtu; and
 - (2) The utilities that are included in this comparison and their locations.

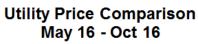
A-18. a. Yes.

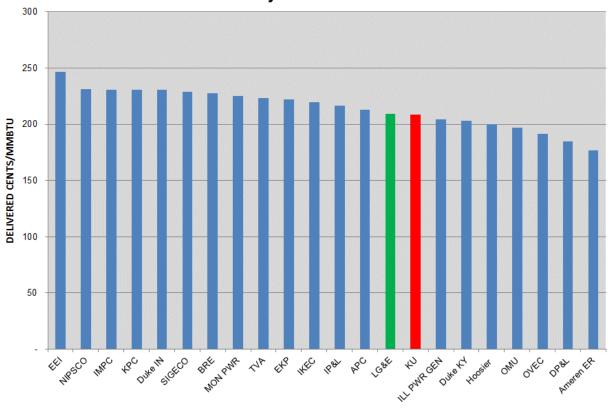
b. KU compares pricing of its coal purchases with neighboring utilities from data that is compiled by the ABB Inc. Ventyx database from the EIA-923 Power Plant Operations Report. The utilities included in the comparison are shown on the list found on page 1 and the chart found of page 2 (the supporting data is contained in pages 3 – 6) of the Attachment to this response and for the period of May 1, 2016 through October 31, 2016.

Attachment to Response to Question No. 18 Page 1 of 6 Billiter

Utilities in Comparison List	T	
UTILITY	ABBREVIATED	PLANT LOCATIONS
AmerenEnergy Generating Co	Ameren ER	Illinois
Big Rivers Electric Corp	BRE	Kentucky
Appalachian Power Co	APC	Virginia, West Virginia
Dayton Power & Light Co (The)	DP&L	Ohio
Duke Energy Indiana	Duke IN	Indiana
Duke Energy Kentucky	Duke KY	Ohio
East Kentucky Power Coop	EKP	Kentucky
Electric Energy Inc	EEI	Illinois
Hoosier Energy Rural Electric Coop Inc	Hoosier	Indiana
Illinois Power Generating Co	ILL PWR GEN	Illinois
Indiana Kentucky Electric Corp	IKEC	Indiana
Indiana Michigan Power Co	IMPC	Indiana
Indianapolis Power & Light	IP&L	Indiana
Kentucky Power Co	KPC	Kentucky
Kentucky Utilities Co	KU	Kentucky
Louisville Gas & Electric Co	LG&E	Kentucky
Monongahela Power Co	MON PWR	West Virginia
Northern Indiana Public Service Co	NIPSCO	Indiana
Ohio Valley Electric Corp	OVEC	Ohio
Owensboro Municipal Utilities	OMU	Kentucky
Southern Indiana Gas & Electric Co	SIGECO	Indiana
Tennessee Valley Authority	TVA	Alabama, Kentucky, Tennessee

Attachment to Response to Question No. 18 Page 2 of 6 Billiter





Attachment to Response to Question No. 18 Page 3 of 6 Billiter

					Delivered Fuel
		Quantity (000s			Price
Plant Operator Name	Reported Source Name	tons)	Btu/lb	lbsSO2/mmBtu	Cents/mmBtu
AmerenEnergy Resources Generating Co	PEABODY COAL SALES	623	8800	0.45	195.18
AmerenEnergy Resources Generating Co	ARCH	739	8945	0.56	162.48
		1,362	8878	0.51	176.62
Appalachian Power Co	SOUTHWESTERN ENERGY SERVICE	23	12497	1.38	230.60
Appalachian Power Co	SOUTHERN COAL SALES CORP	149	12132	1.37	230.18
Appalachian Power Co	CONTURA ENERGY INC	28	13148	4.03	222.56
Appalachian Power Co	CONSOLIDATION COAL CO	801	12788	5.59	237.43
Appalachian Power Co	CONSOL	84	12976	3.97	160.13
Appalachian Power Co	BLACKHAWK MINING LLC	201	12399	1.43	221.17
Appalachian Power Co	AMERICAN ENERGY	1,764	12582	6.81	190.94
Appalachian Power Co	ALPHA COAL	910	12233	1.61	233.63
		3,960	12529	4.78	212.84
B: B: - E!	TTOD DETCOME		=0		
Big Rivers Electric Corp	TTCP PETCOKE RHINO ENERGY	17 124	14150 11383	7.35 4.58	145.50 214.44
Big Rivers Electric Corp Big Rivers Electric Corp	RHINO	59	11369	4.56	214.44
Big Rivers Electric Corp	PEABODY COAL SALES	190	11106	5.63	231.68
Big Rivers Electric Corp	KENAMERICA RESOURCES	247	11802	4.84	215.89
Big Rivers Electric Corp	FORESIGHT COAL SALES	132	11002	6.01	178.50
Big Rivers Electric Corp	ALLIANCE COAL	843	11818	5.32	241.75
· ·		1,613	11640	5.28	227.44
	•	·			-
Dayton Power & Light Co (The)	WILLIAMSON ENERGY	816	11842	4.73	220.05
Dayton Power & Light Co (The)	WHITE OAK RESOURCES LLC	378	11895	4.26	205.05
Dayton Power & Light Co (The)	TUNNEL RIDGE LLC	65	12605	4.23	178.37
Dayton Power & Light Co (The)	TRAFIGURA	201	11804	4.35	178.24
Dayton Power & Light Co (The)	RIVER TRADING	47	11853	2.33	166.43
Dayton Power & Light Co (The) Dayton Power & Light Co (The)	NOBLE ENERGY MARKETING NOBLE AMERICAS GAS & POWER	8 7	12030 12005	1.48 1.53	172.10 172.20
Dayton Power & Light Co (The)	MERCURIA	53	11846	4.75	172.20
Dayton Power & Light Co (The)	KOLMAR AMERICAS INC	16	11534	2.07	155.72
Dayton Power & Light Co (The)	FORESIGHT COAL SALES	250	11842	4.74	187.74
Dayton Power & Light Co (The)	EMERALD	13	11818	2.41	168.08
Dayton Power & Light Co (The)	CONSOL	108	12930	4.28	167.17
Dayton Power & Light Co (The)	COLONA	136	12907	4.29	167.24
Dayton Power & Light Co (The)	COAL NETWORK	71	12006	2.13	167.28
Dayton Power & Light Co (The)	AMERICAN COAL	76	11844	4.48	153.58
Dayton Power & Light Co (The)	ALPHA COAL	423	13085	4.51	151.56
Dayton Power & Light Co (The)	ALLIANCE COAL	344	12322	4.80	160.10
		3,012	12183	4.43	184.95
Duke Energy Indiana	WISE ENERGY GROUPLLC	3	12010	1.02	222.20
Duke Energy Indiana Duke Energy Indiana	SUNRISE COAL SALES	23	11505	6.12	260.30
Duke Energy Indiana	SOLAR SOURCES	529	11330	4.41	192.93
Duke Energy Indiana	PEABODY COAL SALES	2,451	11127	4.88	201.39
Duke Energy Indiana	MODELED - SOLAR SOURCES	323	11321	4.43	192.80
Duke Energy Indiana	FOSSIL COALLLC	9	11187	1.50	201.70
Duke Energy Indiana	DUKE ENERGY	265	11684	5.20	319.71
Duke Energy Indiana	DOMINION	5	11521	1.18	201.40
Duke Energy Indiana	COECLERICI COAL NETWORK	16	11680	1.30	206.14
Duke Energy Indiana	BLACKHAWK MINING LLC	15	12005	1.32	214.60
Duke Energy Indiana	BLACK BEAUTY	953	11490	6.14	209.94
Duke Energy Indiana	ALLIANCE COAL	702	11615	2.30	367.66
		5,293	11324	4.68	230.64

Attachment to Response to Question No. 18 Page 4 of 6 Billiter

					Delivered Fuel
Plant Operator Name	Reported Source Name	Quantity (000s tons)	Btu/lb	lbsSO2/mmBtu	Price Cents/mmBtu
Duke Energy Kentucky	RIVER VIEW COAL	411	11490	5.16	223.99
Duke Energy Kentucky	RHINO ENERGY	16	11356	4.54	184.40
Duke Energy Kentucky	PEABODY COAL TRADE	5	12398	3.21	177.16
Duke Energy Kentucky	FORESIGHT COAL SALES	80	11212	5.72	201.02
Duke Energy Kentucky	CONTURA ENERGY INC	30	12993	4.70	195.15
Duke Energy Kentucky	CONSOL	171	12951	3.90	184.06
Duke Energy Kentucky	ARMSTRONG COAL	76	11747	4.72	187.12
Duke Energy Kentucky	ALPHA COAL	69	13113	4.45	194.57
Duke Energy Kentucky	ALLIANCE COAL	77	12594	4.41	180.20
,		934	12016	4.79	203.33
East Kentucky Power Coop	WHITE OAK RESOURCES LLC	122	11534	4.86	253.02
East Kentucky Power Coop	WHITE COUNTY COAL	122	11464	5.17	266.08
East Kentucky Power Coop	RIVER VIEW COAL	170	11878	4.81	241.53
East Kentucky Power Coop	PEABODY COAL SALES	170	11103	5.58	239.55
East Kentucky Power Coop	PATRIOT COAL SALES	16	11545	5.13	219.90
East Kentucky Power Coop	OXFORD MINING CO	396	11449	6.50	193.82
East Kentucky Power Coop	NALLY & HAMILTON	20	12450	3.01	232.30
East Kentucky Power Coop	FORESIGHT COAL SALES	302	11828	4.76	232.30
East Kentucky Power Coop	BOWIE REFINED COAL	100	11710	3.58	226.22
East Kentucky Power Coop	BLACKHAWK MINING LLC	25	12351	3.11	227.10
East Kentucky Power Coop	B & W RESOURCES	37	12011	2.33	289.13
East Kentucky Power Coop	B & N COAL	234	11200	7.95	179.38
East Kentucky Power Coop	ALLIANCE COAL	234	12601	7.95 4.21	219.68
Last Nemucky Fower Coop	ALLIANOL COAL	1.746	11565	5.54	221.90
		1,740	11303	0.04	221.30
Electric Energy Inc	NORTH ANTELOPE	16	8520	0.42	243.85
Electric Energy Inc	BLACK THUNDER WEST	95	8661	0.72	231.75
Electric Energy Inc	BLACK THUNDER ARCH	287	8699	0.54	231.75
Electric Energy Inc	BELLAYRE	48	8520	0.56	216.55
Electric Energy Inc	ANTELOPE	383	8673	0.54	265.89
		828	8669	0.56	246.81
Hoosier Energy Rural Electric Coop Inc	SUNRISE COAL SALES	652	11712	5.75	203.68
Hoosier Energy Rural Electric Coop Inc	PEABODY COAL SALES	767	11122	5.49	196.59
Theodic: Energy Trans. Electric Goop and	. 27.202. 007.207.220	1,418	11393	5.61	199.94
What's Barrie Consenting On	DEADORY COAL CALEO		0== 1		000 70
Illinois Power Generating Co	PEABODY COAL SALES	968	8754	0.44	200.70
Illinois Power Generating Co	CLOUD PEAK	35	8851	0.61	231.80
Illinois Power Generating Co	BLACK THUNDER WEST	52	8884	0.61	231.80
Illinois Power Generating Co	BLACK THUNDER ARCH	123	8821	0.62	231.80
Illinois Power Generating Co	BELLAYRE	463 1.642	8752 8765	0.49	200.70
		1,642	8/65	0.48	204.34
Indiana Kentucky Electric Corp	RESOURCE FUELS	488	11491	5.15	259.64
Indiana Kentucky Electric Corp	KNIGHTHAWK	457	11207	5.24	197.92
Indiana Kentucky Electric Corp	FORESIGHT COAL SALES	201	11356	5.45	190.56
		1,146	11354	5.24	223.24

Attachment to Response to Question No. 18 Page 5 of 6 Billiter

Plant Operator Name	Reported Source Name	Quantity (000s tons)	Btu/lb	lbsSO2/mmBtu	Delivered Fuel Price Cents/mmBtu
Indiana Michigan Power Co	RWE TRADING AMERICASINC	39	11972	1.57	245.65
Indiana Michigan Power Co	PEABODY COAL SALES	1,821	8718	0.48	227.16
Indiana Michigan Power Co	NOBLE GAS MARKETING	19	12141	1.42	223.80
Indiana Michigan Power Co	NOBLE ENERGY MARKETING	113	12066	1.52	225.21
Indiana Michigan Power Co	CLOUD PEAK	181	8841	0.53	213.86
Indiana Michigan Power Co	ARCH	245	8932	0.61	215.59
Indiana Michigan Power Co	ALPHA COAL	230	12165	1.34	273.93
		2,649	9262	0.64	230.82
Indianapolis Power & Light	TRIAD	179	11631	5.95	206.50
Indianapolis Power & Light	SUNRISE COAL SALES	284	11818	5.50	220.80
Indianapolis Power & Light	COALSALES LLC	988	11278	5.52	218.43
Indianapolis Power & Light	COAL SALES	178	11340	5.71	218.09
Indianapolis Power & Light	ALLIANCE COAL	198	11717	2.40	209.25
		1,828	11450	5.24	216.57
Kentucky Power Co	NOBLE GAS MARKETING	11	12200	1.46	223.70
Kentucky Power Co	NOBLE ENERGY MARKETING	90	11977	1.52	228.15
Kentucky Power Co	CONSOLIDATION COAL CO	668	12674	6.24	202.75
Kentucky Power Co	ALPHA COAL	588	12137	1.37	264.52
remarky i ower oo	ALI HA OOAL	1,358	12391	3.78	230.76
Kantualii Ikilitiaa Ca	TRIAD	321	44045	6.04	200.04
Kentucky Utilities Co	RHINO ENERGY	321	11615 11380	6.01 4.59	260.84 229.29
Kentucky Utilities Co Kentucky Utilities Co	PEABODY COAL TRADE	34	10143	2.30	148.24
	KOLMAR AMERICAS INC	34 29	10143	2.30 1.65	172.10
Kentucky Utilities Co Kentucky Utilities Co	FORESIGHT COAL SALES	347	11766	4.70	172.10
Kentucky Utilities Co	EAGLE RIVER COAL	347 86	12669	4.70 6.14	197.91
Kentucky Utilities Co	COALSALES LLC	370	11178	5.65	213.53
Kentucky Utilities Co	BOWIE	23	11960	3.08	213.53 254.42
Kentucky Utilities Co	ARMSTRONG COAL	871	11283	5.73	173.01
Kentucky Utilities Co	AMERICAN COAL	250	11747	4.21	221.19
Kentucky Utilities Co	ALLIANCE COAL	444	11511	4.49	226.02
Remucky Clinties Co	ALLIANCE COAL	3,171	11459	5.12	208.72
				4.00	200.07
Louisville Gas & Electric Co	RHINO ENERGY	33	11346	4.68	228.07
Louisville Gas & Electric Co	PEABODY COAL TRADE	21	10026	2.35	147.95
Louisville Gas & Electric Co	KOLMAR AMERICAS INC	20	10269	1.66	173.27
Louisville Gas & Electric Co	FORESIGHT COAL SALES	138	11816	4.63	195.70
Louisville Gas & Electric Co	EAGLE RIVER COAL	54	12643	5.74	193.26
Louisville Gas & Electric Co	COALSALES LLC	18	11101	5.65	178.58
Louisville Gas & Electric Co	ARMSTRONG COAL	571	11277	5.78	178.11
Louisville Gas & Electric Co	ARCH	158	8925	0.58	217.77
Louisville Gas & Electric Co	AMERICAN COAL	199	11726	4.22	219.21
Louisville Gas & Electric Co	ALLIANCE COAL	2,067	11760	5.51	218.49
		3,279	11526	5.16	209.43

Attachment to Response to Question No. 18 Page 6 of 6 Billiter

Plant Operator Name	Reported Source Name	Quantity (000s tons)	Btu/lb	lbsSO2/mmBtu	Delivered Fuel Price Cents/mmBtu
Monongahela Power Co	TUNNEL RIDGE LLC	98	12604	4.29	333.26
Monongahela Power Co	MEPCO OPERATIONS	509	12074	4.58	217.47
Monongahela Power Co	FIRSTENERGY	449	12916	5.32	172.25
Monongahela Power Co	CONSOL	2,522	12484	5.47	237.62
Monongahela Power Co	ARCH	2	12985	1.82	140.20
Monongahela Power Co	AMERICAN ENERGY	1,344	12589	7.08	206.88
Monongahela Power Co	ALLIANCE COAL	328	12592	4.45	238.94
	L	5,252	12517	5.70	225.43
Northern Indiana Public Service Co	SUNRISE COAL SALES	468	11672	5.69	228.73
Northern Indiana Public Service Co	PEABODY COAL SALES	406	8786	0.45	228.70
Northern Indiana Public Service Co	CONSOL	148	12932	3.90	216.01
Northern Indiana Public Service Co	COALSALES LLC	754	10968	5.06	254.48
Northern Indiana Public Service Co	ARCH	682	8998	0.55	212.52
Northern Indiana Public Service Co	ALLIANCE COAL	46	11740	4.24	197.40
	[2,503	10340	3.12	231.51
Ohio Valley Electric Corp	AMERICAN ENERGY	1,163	12297	6.77	191.41
		1,163	12297	6.77	191.41
Owensboro Municipal Utilities	WEST KY MINERALS	156	11218	4.93	195.00
Owensboro Municipal Utilities	PEABODY COAL SALES	84	11222	6.82	197.28
Owensboro Municipal Utilities	KENAMERICA RESOURCES	40	11743	4.85	195.54
Owensboro Municipal Utilities	ARMSTRONG	186	11868	4.53	199.00
		467	11523	5.11	197.09
Southern Indiana Gas & Electric Co	SUNRISE COAL SALES	672	11601	5.99	229.15
		672	11601	5.99	229.15
Tennessee Valley Authority	PEABODY COAL TRADE	11	11050	4.83	247.00
Tennessee Valley Authority	PEABODY COAL SALES	2.519	10063	2.06	204.96
Tennessee Valley Authority	MR COAL MARKETING & TRADINGLL	46	12321	1.66	215.34
Tennessee Valley Authority	MR COAL MARKETING	58	12279	1.74	215.62
Tennessee Valley Authority	KOPPER GLO	82	12838	1.97	223.10
Tennessee Valley Authority	KENAMERICA RESOURCES	786	11775	4.84	202.32
Tennessee Valley Authority	FORESIGHT COAL SALES	521	11770	4.69	219.22
Tennessee Valley Authority	EDF TRADING	24	13100	1.16	280.56
Tennessee Valley Authority	COECLERICI COAL NETWORK	15	8761	0.75	172.12
Tennessee Valley Authority	CLOUD PEAK	744	8865	0.52	197.71
Tennessee Valley Authority	BLACKHAWK MINING LLC	59	12657	1.41	236.35
Tennessee Valley Authority	B & W RESOURCES	43	12251	1.79	242.94
Tennessee Valley Authority	ARMSTRONG COAL	1,037	11772	4.64	230.63
Tennessee Valley Authority	ARCH	3.943	8905	0.67	195.07
Tennessee Valley Authority	ALPHA COAL	23	12197	1.49	283.38
Tennessee Valley Authority	ALLIANCE COAL	1,470	11759	4.93	264.81
Tennessee Valley Authority	ALLIANCE COAL	957	12541	4.99	267.10
		12,338	10406	2.59	219.63

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 19

Witness: Delbert Billiter

- Q-19. For the period under review by generating station, list the percentages of KU's coal delivered by:
 - a. Rail;
 - b. Truck;
 - c. Barge;
 - d. Other (specify)
- A-19. E.W. Brown Station
 - a. Rail 87%
 - b. Truck 13%
 - c. Barge NA

Ghent Station

- a. Rail NA
- b. Truck NA
- c. Barge 100%

Trimble Station/PRB

- a. Rail NA
- b. Truck NA
- c. Barge 100%

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 20

Witness: Delbert Billiter

Q-20. For each generating station, state the methods of coal delivery currently available.

A-20. E.W. Brown – Rail and Truck

Ghent-Barge

Trimble County/PRB - Barge

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 21

Witness: Delbert Billiter

- Q-21. a. State KU's coal inventory level in tons and in number of days' supply as of October 31, 2016. Provide this information by generating station and in the aggregate.
 - b. Describe the criteria used to determine the number of days' supply.
 - c. Compare KU's coal inventory as of October 31, 2016 to its inventory target for that date for each plant and for total inventory.
 - d. If actual coal inventory exceeds inventory target by 10 days' supply, state the reasons for the additional inventory.
 - e. (1) State whether KU expects any significant changes in its current coal inventory target within the next 12 months.
 - (2) If the response is yes, state the expected change and the reasons for this change.

A-21. a. As of October 31, 2016:

EW Brown	221,071 Tons; 35 Days	Target 30-55 Days
Ghent	931,067 Tons; 44 Days	Target 20-39 Days
Trimble County*	472,584 Tons; 75 Days	Target 21-44 Days
Total	1,624,722 Tons; 49 Days	Target 23-44 Days

- * Trimble County coal inventory includes both PRB and High Sulfur coals used for Trimble County Unit 2.
- 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 rating from its air permit to operate).

Upper and lower tons/day targeted inventory days were established for each plant taking into consideration each plant's operating parameters. Each plants "least cost" inventory range is established annually during the planning process based on historical coal burn/receipt variances, procurement reaction time for long-term fuel supply agreements, current coal and electricity prices offset by carrying and outage costs.

- c. See (a) above.
- d. A combination of low load and low gas prices caused system coal consumption to be lower than budget before and during the review period. Increased gas generation, primarily due to CR7, displaced coal-fired generation during the review period.
- e. (1) KU does not expect significant changes in its current coal inventory target levels; however, during the Companies' planning cycle minor adjustments may be made to the inventory targets if warranted.
 - (2) Not applicable.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 22

Witness: Delbert Billiter

- Q-22. a. State whether KU has audited any of its coal contracts during the period from May 1, 2016 to October 31, 2016.
 - b. If the response is yes, for each audited contract:
 - (1) Identify the contract;
 - (2) Identify the auditor;
 - (3) State the results of the audit; and
 - (4) Describe the actions that KU took as a result of the audit.
- A-22 a. No. KU has not conducted any financial audits of coal companies. KU's current coal contracts either contain a fixed price or a portion of the base contract price is adjusted using government published indices to reflect the changes in the cost. These agreements thus do not require audits. Either 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.

As noted in previous filings, governmental impositions may be imposed on the mining industry. As claims for governmental impositions are received, LG&E reviews and may use consultants to review the claims.

Alliance Coal, LLC in accordance with the provisions of Section 8.3 New Impositions of Agreement J09002, requested a price increase for calendar year 2015. The Parties agreed to a settlement. A copy of the Settlement Agreement effective December 1, 2016 is being filed with the Commission under seal pursuant to a Petition for Confidential Protection.

Alliance Coal, LLC in accordance with the provisions of Section 8.3 New Impositions of Agreement J12007, requested a price increase for calendar year 2015. The Parties agreed to a settlement. A copy of the Settlement Agreement effective December 1, 2016 is being filed with the Commission under seal pursuant to a Petition for Confidential Protection.

Alliance Coal, LLC in accordance with the provisions of Section 8.4 New Impositions of Agreement J13004, requested a price increase for calendar year 2015. The Parties agreed to a settlement. A copy of the Settlement Agreement effective December 1, 2016 is being filed with the Commission under seal pursuant to a Petition for Confidential Protection.

Alliance Coal, LLC in accordance with the provisions of Section 8.4 New Impositions of Agreement J14011, requested a price increase for calendar year 2015. The Parties agreed to a settlement. A copy of the Settlement Agreement effective December 1, 2016 is being filed with the Commission under seal pursuant to a Petition for Confidential Protection.

b. Not applicable.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 23

Witness: Derek Rahn

- Q-23. a. State whether KU has received any customer complaints regarding its FAC during the period from May 1, 2016 to October 31, 2016.
 - b. If the response is yes, for each complaint, state:
 - (1) The nature of the complaint; and
 - (2) KU's response.
- A-23. a. No.
 - b. Not applicable.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 24

Witness: Delbert Billiter

- Q-24. a. State whether KU is currently involved in any litigation with its current or former coal suppliers.
 - b. If the response is yes, for each litigation:
 - (1) Identify the coal supplier;
 - (2) Identify the coal 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 coal suppliers.
- A-24. a. KU is not involved in any litigation with its coal suppliers.
 - a. Not applicable.
 - b. Not applicable.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 25

Witness: Delbert Billiter

- Q-25. List each written coal supply solicitation issued during the period May 1, 2016 to October 31, 2016.
 - a. For each solicitation, provide the date of the 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. 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-25. **SOLICITATION 1**

The final selection of the vendors who responded to the solicitation dated March 2, 2016 was completed for middlings spot order for 2017 and was filed in Case No. 2016-00232. The selection of vendors for 2017 and beyond was not completed at the time the data responses were filed for high sulfur coal. The requested information for the selected vendors is provide below for the high sulfur coal purchased for 2017 - 2020.

a. Date: March 2, 2016 Contract/Spot: Contract or Spot

Quantities: No minimum or maximum specified

Quality: Suitable for KU's Ghent Station and LG&E's Trimble County and

Mill Creek Stations

Period: April through December 2016 – Spot

2017 and beyond - Contract

Generating Units: KU's Ghent Station and LG&E's Trimble County and Mill Creek Stations

b. Number of vendors receiving bids: 122

Number of vendors responded: 22 companies / 46 offers

Selected vendor(s): The vendor(s) selected were based upon the lowest evaluated

delivered cost.

High Sulfur Term

Alliance Coal, LLC – J17005, J18003 The American Coal Company – J17004 Armstrong Coal Sales – J18002

The bid analysis information is confidential and proprietary information and is being filed with the Commission under seal pursuant to a Petition for Confidential Protection.

SOLICITATION 2

a. Date: September 20, 2016

Contract/Spot: Contract or Spot

Quantities: No minimum or maximum specified

Quality: Suitable for KU's Ghent Station and LG&E's Trimble County and

Mill Creek Stations

Period: 2018 and beyond - Contract

Generating Units: KU's Ghent Station and LG&E's Trimble County and Mill Creek

Stations

b. Number of vendors receiving bids: 123

Number of vendors responded: 14 companies / 23 offers

Selected vendor(s): Will be provided once the process is complete.

The final selection of the vendor(s) for high sulfur coal for the period of 2018-2020 from the bids are in negotiations and are still in progress. The name of the selected vendors and supporting bid tabulation will be provided to the Commission after the negotiations are completed and the agreements signed.

The bid analysis information is confidential and proprietary information and is being filed with the Commission under seal pursuant to a Petition for Confidential Protection.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 26

Witness: Delbert Billiter

- Q-26. List each oral solicitation for coal supplies issued during the period from May 1, 2016 to October 31, 2016.
 - 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 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-26. KU did not issue any oral solicitation.
 - a. Not applicable.
 - b. Not applicable.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 27

Witness: Delbert Billiter

Q-27. For the period from May 1, 2016 to October 31, 2016, list each vendor from whom coal was purchased and the quantity and nature of each purchase (e.g., spot or contract). For the period under review in total, provide the percentage of purchases that were spot versus contract.

A-27.

	PURCHASE	
<u>VENDOR</u>	TONNAGE	TYPE
Alliance Coal LLC - J12007	257,247	Contract
Alliance Coal LLC - J16001B	49,240	Contract
Alliance Coal LLC - J16004	31,739	Spot
Alliance Coal LLC - J16008	107,254	Contract
Arch Coal Sales Company Inc J16012	157,603	Contract
Armstrong Coal Company - J07032	306,976	Contract
Armstrong Coal Company - J14004	126,668	Contract
Armstrong Coal Company - J14010	41,420	Contract
Armstrong Coal Company - J16003	276,016	Contract
Armstrong Coal Company - J16017	120,125	Contract
Bowie Refined Coal LLC - K14037	22,568	Contract
Peabody COALSALES LLC - J16007	369,563	Contract
Eagle River Coal LLC - J16005	85,584	Contract
Foresight Coal Sales LLC - J16009	346,934	Spot
Kolmar Americas - J16019	29,435	Spot
Peabody Coaltrade LLC - J16016	33,809	Spot
Rhino Energy LLC - J14001	397,252	Contract
Triad Mining LLC - J15002	320,830	Contract
The American Coal Company - J16002	250,029_	Spot
	3,330,293	
	2,638,347	79% Contract
	691,946	21% Spot
	3,330,293	

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 28

Witness: Charles R. Schram

- Q-28. For the period from May 1, 2016 to October 31, 2016, list each vendor from whom natural gas was purchased for generation and the quantity and nature of each purchase (e.g., spot or contract). For the period under review in total, provide the percentage of purchases that were spot versus contract.
- A-28. See the attachment for the list of vendors, associated quantities, and the nature of the natural gas purchases. KU has contracted with Texas Gas Pipeline for long-term firm gas transport for both LG&E and KU combustion turbine generation.

Beginning in July 2016, a portion of the natural gas used to fuel the Cane Run 7 combined cycle unit was purchased on a forward basis. Other than those forward purchases and the purchases made pursuant to the Special Contract referenced below, natural gas was purchased on an 'as-needed' spot market basis. The Special Contract and the contracts for long-term firm gas transport have been filed with the Commission.

Purchases from Louisville Gas and Electric Company are primarily for LG&E-owned coal and gas fired generation and are made in accordance with a Special Contract under 807 KAR 5:011 Section 13.¹ Additionally, purchases from Columbia Gas are for KU-owned generation served by the local distribution company.

¹ The Special Contract for Firm Gas Sales and Firm Transportation Service dated September 28, 2007 and effective April 11, 2008, between Louisville Gas and Electric Company, on behalf of its Gas Distribution Business, and Louisville Gas and Electric Company and Kentucky Utilities Company, on behalf of their Electric Generation Business, was approved by the Kentucky Public Service Commission in Case No. 2007-00449.

KU and LG&E have joint ownership in the following combustion turbine and combined cycle units:

Station	Units	KU Ownership	LG&E Ownership
Trimble County	5 and 6	71%	29%
Trimble County	7, 8, 9 and 10	63%	37%
Brown	5	47%	53%
Paddy's Run	13	47%	53%
Brown	6 and 7	62%	38%
Cane Run	7	78%	22%

Fuel expenses for actual commodity used and associated pipeline transport charges, if any, are allocated to the Companies based on their respective ownership percentages.

<u>Vendor</u>	Type	MMBtu
Anadarko Energy Services Company	Spot	44,200
Atmos Energy Marketing, LLC	Spot	143,031
BG Energy Merchants, LLC	Spot	310,600
BP Energy Company	Spot	4,467,098
Cargill, Inc.	Spot	45,000
CIMA Energy, LTD	Spot	419,522
Colonial Energy, Inc.	Spot	136,100
Columbia Gas of Kentucky, Inc.	GSO Customer*	4,742
ConocoPhillips Company	Spot	76,600
Direct Energy Business Marketing,	Spot	139,900
DTE Energy Trading, Inc.	Spot	1,090,233
Eco-Energy, LLC	Spot	66,000
EDF Trading North America, LLC	Spot	37,900
Exelon Generation Company, LLC	Spot	534,600
Laclede Energy Resources, Inc.	Spot	302,501
Macquarie Energy, LLC	Spot	101,300
Mercuria Energy America, Inc.	Spot	118,500
Mercuria Energy Gas Trading LLC	Spot	214,700
NextEra Energy Power Marketing, LLC	Spot	600
NJR Energy Services Company	Spot	165,509
Range Resources - Appalachia, LLC	Spot	456,028
Sequent Energy Management, L.P.	Spot	2,039,300
Shell Energy North America (US), L.P.	Spot	443,100
SWN Energy Services Company, LLC	Spot	30,000
Tenaska Marketing Ventures	Spot	13,058,894
Tennessee Valley Authority	Spot	100,000
Twin Eagle Resource Management, LLC	Spot	195,300
United Energy Trading, LLC	Spot	13,796
Vitol Inc.	Spot	10,000
LG&E Gas Supply	Special Contract**	166,999
EDF Trading North America, LLC	Forward	1,850,000
Mercuria Energy America, Inc.	Forward	610,000
Sequent Energy Management, L.P.	Forward	310,000

Total Volume 27,702,053 MMBtu

^{*}KU is a General Sales Customer of Columbia Gas of Kentucky for the Haefling Plant; no volume purchase commitments.

^{**}LG&E is the local gas distribution company; no volume purchase commitments.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 29

Witness: Charles R. Schram / Delbert Billiter

- Q-29. State whether KU engages in hedging activities for its coal or natural gas purchases used for generation. If the response is yes, describe the hedging activities in detail.
- A-29. KU does not engage in financial hedging activities for its coal or natural gas purchases.

KU does use physical hedging in contracting for coal. KU uses the following guidelines in utilization of coal under contract for the minimum projected requirement:

1 year out 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%

KU also uses physical hedging in contracting for natural gas. KU began to purchase a portion of the natural gas for the Cane Run 7 combined cycle unit on a forward basis beginning in July 2016. For the current year, the Company's practice targets purchasing no more than 50 percent of the forecasted burn at CR7. Longer-term, KU uses the following guidelines for the purchase of natural gas under contract for the minimum projected Cane Run 7 requirement:

1 year out 10 - 50%2 years out 0 - 30%3 years out 0 - 10%

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 30

Witness: Delbert Billiter / Stuart A. Wilson

- Q-30. For each generating station or unit for which a separate coal pile is maintained, state for the period from May 1, 2016 to October 31, 2016 the actual amount of coal burned in tons, actual amount of coal deliveries in tons, total kWh generated, and actual capacity factor at which the plant operated.
- A-30. The information requested from May 1, 2016 to October 31, 2016 is shown in the table below:

				Capacity Factor
				(Net MWh)/
	Coal Burn	Coal Receipts		(period hrs x
Plant	(Tons)	(Tons)	Net MWh	MW rating)
E. W. Brown	573,403	522,573	1,149,508	38.2%
Ghent	2,909,101	2,650,117	6,173,900	72.9%
Trimble County HS	N/A	1,558,541	N/A	N/A
Trimble County PRB	N/A	157,603	N/A	N/A
Trimble County 2	767,906	N/A	1,778,998	55.0%

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

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

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 31

Witness: Stuart A. Wilson

- Q-31. For each natural gas generating unit, state for the period from May 1, 2016, to October 31, 2016, the actual amount of natural gas burned, total kWh generated, and actual capacity factor at which the plant operated.
- A-31. The information requested from May 1, 2016 to October 31, 2016 is shown in the table below:

			Capacity Factor
			(Net MWh)/
	Gas Burn		(period hrs x
Unit	(MCF)	Net MWh	MW rating)
Cane Run 7	17,290,067	2,604,339	89.1%
Brown 5	217,918	16,603	2.9%
Brown 6	192,570	17,382	2.7%
Brown 7	185,874	16,701	2.6%
Brown 8	729,127	58,838	11.0%
Brown 9	816,230	64,692	12.1%
Brown 10	508,527	40,501	7.6%
Brown 11	549,644	41,940	7.8%
Haefling	4,130	195	0.2%
Paddys Run 13	994,785	93,010	14.3%
Trimble Co 5	851,170	73,287	10.4%
Trimble Co 6	544,871	48,085	6.8%
Trimble Co 7	965,833	84,282	12.0%
Trimble Co 8	162,333	14,325	2.0%
Trimble Co 9	1,178,770	105,994	15.1%
Trimble Co 10	879,388	77,477	11.0%

- Notes: 1 Values for jointly owned units reflect 100% of the unit.
 - 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.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 32

Witness: Charles R. Schram / Delbert Billiter

- Q-32. a. During the period from May 1, 2016 to October 31, 2016, have there been any changes to KU's written policies and procedures regarding its fuel procurement?
 - b. If yes,
 - (1) Describe the changes;
 - (2) State the date(s) the changes were made;
 - (3) Explain why the changes were made; and
 - (4) Provide the written policies and procedures as changed.
 - c. If no, provide the date when 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-32. a. No changes were made during the period referenced above to the Corporate Fuels and By-Products Procurement Procedures or to the Power Supply Commodity Policy Natural Gas Fuel for Generation.
 - b. Not applicable.
 - c. The Corporate Fuels and By-Products Procurement Procedures were last changed effective August 1, 2015 and were provided to the Commission in response to Question No. 15 in Case No. 2016-00003. The Power Supply Commodity Policy Natural Gas Fuel for Generation was effective February 1, 2016, and was provided to the Commission in response to Question No. 15 in Case No. 2016-00003.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 33

Witness: Delbert Billiter

- Q-33. a. State whether KU is aware of any violations of its policies and procedures regarding fuel procurement that occurred prior to or during the period from May 1, 2016 to October 31, 2016.
 - b. If the response is yes, for each violation:
 - (1) Describe the violation;
 - (2) Describe the action(s) that KU took upon discovering the violation; and
 - (3) Identify the person(s) who committed the violation.
- A-33. a. No.
 - b. Not applicable.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 34

Witness: Charles R. Schram / Delbert Billiter

- Q-34. Identify and explain the reasons for all changes in the organizational structure and personnel of the departments or divisions that are responsible for KU's fuel procurement activities that occurred during the period from May 1, 2016, to October 31, 2016.
- A-34. Changes that occurred in the Corporate Fuels and By-Products Department:

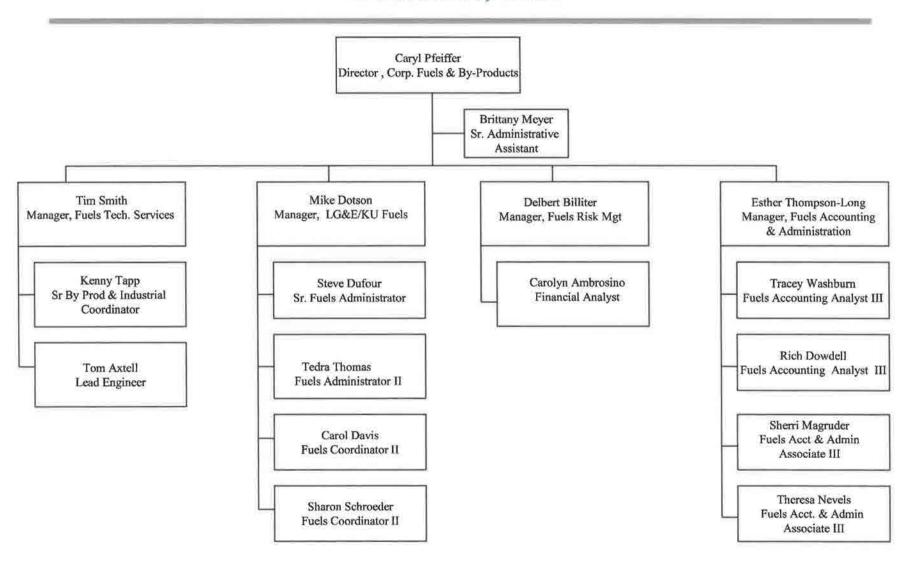
Yvette Rhoads, Senior Secretary left the company September 6, 2016.

Brittany Meyer joined the department as Senior Administrative Assistant on December 28, 2016.

See attached organization chart dated December 2016 for Corporate Fuels and By-Products.

The Power Supply department has no organizational or personnel changes to report.

Corporate Fuels and By-Products December, 2016



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Case No. 2017-00003

Question No. 35

Witness: Eileen L. Saunders

- Q-35. a. Identify all changes that KU made during the period from May 1, 2016 to October 31, 2016 to its maintenance and operation practices that affect fuel usage at KU's generation facilities.
 - b. Describe the impact of these changes on KU's fuel usage.
- A-35. a. None.
 - b. Not applicable.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 36

Witness: Derek Rahn

- Q-36. a. List all intersystem sales during the period from May 1, 2016 to October 31, 2016 in which KU used a third party's transmission system.
 - b. For each sale listed above:
 - (1) Describe the effect on the FAC calculation of line losses related to intersystem sales when using a third party's transmission system; and
 - (2) State the line-loss factor used for each transaction and describe how such line-loss factor was determined.
- A-36. a. There were no inter-system sales from May 1, 2016 through October 31, 2016, which required a third party's transmission system.
 - b. Not applicable.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 37

Witness: Derek Rahn

- Q-37. a. Describe the effect on the FAC calculation of line losses related to intersystem sales when not using a third party's transmission system.
 - b. Describe each change that KU made to its methodology for calculating intersystem sales line losses during the period from May 1, 2016 to October 31, 2016.

A-37.

- a. KU continues to use a line loss factor of 0.5% to determine the cost of fuel associated with line losses incurred to make an intersystem sale and recovered from such sale consistent with the Commission's June 7, 2013, Amended Order in Case No. 2012-00552.
- b. There have been no changes regarding the calculation of losses associated with intersystem sales.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 38

Witness: Delbert Billiter

- Q-38. State whether KU has solicited bids for coal with the restriction that it was not mined through strip mining or mountain top removal. If the response is yes, explain the reasons for the restriction on the solicitation, the quantity in tons and price per ton of the coal purchased as a result of this solicitation, and the difference between the price of this coal and the price it could have obtained for the coal if the solicitation had not been restricted.
- A-38. KU has not solicited bids with this restriction.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 39

Witness: Eileen L. Saunders

- Q-39. Provide a detailed discussion of any specific generation efficiency improvements KU has undertaken during the period from May 1, 2016, to October 31, 2016.
- A-39. KU has not realized any efficiency improvements through major component projects during this period. KU strives to maintain unit efficiency through routine, cyclical, planned outage maintenance. This maintenance work continues to focus on reestablishing expected turbine efficiency degraded since the previous outage. Additionally, KU maintains unit efficiency through continuous monitoring of all plant 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 issue 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.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 40

Witness: Derek Rahn

- Q-40. State whether all contracts related to commodity and/or 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-40. Yes, all contracts for May 2016 through October 2016 related to commodity and/or transportation have been filed with the Commission.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 41

Witness: Delbert Billiter / Charles R. Schram

- Q-41. 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-41. The Company has no unresolved or unsettled issues to report.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 42

Witness: Charles R. Schram

- Q-42. Explain in detail how KU classifies a generation outage as forced or scheduled.
- A-42. The Company uses the definitions and guidelines published by the North American Electric Reliability Corporation ("NERC") for reporting to the Generating Availability Data System ("GADS"). GADS definitions for determining outage classifications can be found on NERC's website:

(http://www.nerc.com/pa/RAPA/gads/Pages/Data%20Reporting%20Instructions.aspx).

Below are excerpts from the NERC GADS definitions for planned (scheduled), maintenance, and forced outages:

PO – Planned Outage

An outage that is scheduled well in advance and is of a predetermined duration, can last for several weeks, and occurs only once or twice a year. Turbine and boiler overhauls or inspections, testing, and nuclear refueling are typical planned outages. For a planned outage, all of the specific individual maintenance and operational tasks to be performed are determined in advance and are referred to as the "original scope of work." The general task of repairing turbines, boilers, pumps, etc. is not considered a work scope because it does not define the individual tasks to be performed. For example, if a general task such as repair boiler is considered the work scope, it is impossible to conclude that any boiler work falls outside of the original scope of work. Discovery work and re-work which render the unit out of service beyond the estimated PO end date are not considered part of the original scope of work. A planned extension may be used only in instances where the original scope of work requires more time to complete than the estimated time. For example, if an inspection that is in the original scope of work for the planned outage takes longer than scheduled, the extra time should be coded as an extension (PE). However, if damage found during the inspection results in an extension of the outage, the extra time required to make repairs should be coded as a forced outage.

MO – **Maintenance Outage**

An outage that can be deferred beyond the end of the next weekend (defined as Sunday at 2400 hours or as Sunday turns into Monday), but requires that the unit be removed from service, another outage state, or Reserve Shutdown state before the next Planned Outage

(PO). Characteristically, a MO can occur any time during the year, has a flexible start date, may or may not have a predetermined duration, and is usually much shorter than a PO. Discovery work and re-work which render the unit out of service beyond the estimated MO end date are not considered part of the original scope of work. A maintenance extension may be used only in instances where the original scope of work requires more time to complete than the estimated time. For example, if an inspection that is in the original scope of work for the outage takes longer than scheduled, the extra time should be coded as an extension (ME). If the damage found during the inspection is of a nature that the unit could be put back on-line and be operational past the end of the upcoming weekend, the work could be considered MO. If the inspection reveals damage that prevents the unit from operating past the upcoming weekend, the extended work time should be Forced Outage (U1).

U1 – Unplanned (Forced) Outage — Immediate

This is an outage that requires immediate removal of a unit from service, another outage state, or a reserve shutdown state. This type of outage usually results from immediate mechanical/electrical/hydraulic control system trips and operator-initiated trips in response to unit alarms.

U2 – Unplanned (Forced) Outage — Delayed

This is an outage that does not require immediate removal of a unit from the in-service state, instead requiring removal within six hours. This type of outage can only occur while the unit is in service.

U3 – Unplanned (Forced) Outage — Postponed

This is an outage that can be postponed beyond six hours but requires that a unit be removed from the in service state before the end of the next weekend (Sunday at 2400 or before Sunday turns into Monday). This type of outage can only occur while the unit is in service.

Response to Commission Staff's First Request for Information in Appendix B of Commission's Order Dated February 6, 2017

Case No. 2017-00003

Question No. 43

Witness: Derek Rahn

- Q-43. Refer to Form B filings for the review period for KU and its sister company, Louisville Gas and Electric Company ("LG&E").
 - a. The Natural Gas Fuel Inventory Schedule for the Brown station shows a beginning and ending balance. State whether this indicates that KU has a storage facility for natural gas at the Brown station or whether this represents natural gas stored on the pipeline.
 - b. KU and LG&E jointly own the Brown combustion turbines. Explain why KU shows a beginning and ending inventory balance, but LG&E does not.

A-43.

- a. The Natural Gas Fuel Inventory represents the natural gas stored in the pipeline. KU does not have natural gas storage facilities.
- b. KU and LG&E jointly own Brown combustion turbines. For accounting purposes, given the insignificant amount of gas inventory for electric generation due to the lack of physical storage, gas inventory is recorded entirely on KU's books for these generation stations. This avoids KU from having to maintain separate inventory accounts for each generation unit thereby eliminating the need to perform numerous cost allocations on insignificant amounts. Once the natural gas is received at the station and burned by a specific unit, the natural gas cost is then allocated based on the KU and LG&E ownership percentage of that specific unit to ensure costs are properly charged to each company.