COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN ELECTRONIC EXAMINATION OF THE)	
APPLICATION OF THE FUEL ADJUSTMENT)	
CLAUSE OF KENTUCKY UTILITIES)	CASE NO. 2021-00294
COMPANY FROM NOVEMBER 1, 2020)	
THROUGH APRIL 30, 2021)	

RESPONSE OF KENTUCKY UTILITIES COMPANY TO THE COMMISSION STAFF'S INITIAL REQUEST FOR INFORMATION DATED AUGUST 18, 2021

FILED: SEPTEMBER 1, 2021

COMMONWEALTH OF KENTUCKY)) **COUNTY OF JEFFERSON**)

The undersigned, Delbert Billiter, being duly sworn, deposes and says that he is Manager - LG&E and KU Fuels 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.

illit

Delbert Billiter

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

and State, this 27th day of 2021.

Notary Public

603967 Notary Public ID No.

My Commission Expires:

COMMONWEALTH OF KENTUCKY)) **COUNTY OF JEFFERSON**)

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

Michael P. Drake

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

and State, this / St day of 2021.

Notary Public

603967 Notary Public ID. No.

My Commission Expires:

COMMONWEALTH OF KENTUCKY)) COUNTY OF JEFFERSON)

The undersigned, **Andrea M. Fackler**, being duly sworn, deposes and says that she is Manager - Revenue Requirement/Cost of Service 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.

1. Jadelle

Andrea M. Fackler

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

State, this 1st day of September 2021.

otary Public

603967 Notary Public ID No.

My Commission Expires:

COMMONWEALTH OF KENTUCKY)) **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.

Johnan Charles R. Schram

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

and State, this 1st day of Sepete 2021.

otary Public

603967 Notary Public ID No.

My Commission Expires:

COMMONWEALTH OF KENTUCKY)) COUNTY OF JEFFERSON)

The undersigned, **Stuart A. Wilson**, being duly sworn, deposes and says that he is Director, Energy Planning, Analysis & Forecasting 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 <u>3/5</u> day of <u>August</u> 2021.

lythorte Notary Public

603967 Notary Public ID No.

My Commission Expires:

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 1

Responding Witness: Delbert Billiter

- Q-1. For the period under review, provide the amount of coal purchased in tons and the percentage of purchases that were spot versus contract.
- A-1. During the period under review, KU purchased 2,759,817 tons of coal.

Spot:	12%	(340,805 tons)
Contract:	88%	(2,419,012 tons)

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 2

Responding Witness: Delbert Billiter

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

November 1	L, 2020 through April 30, 2021					
(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Location of	Delivery	Actual Quantity	Tonnage	Current Price**
Contract/PO	Supplier	Production Facility	Method	Received	Requirement*	(\$/ton)
J16006B	ACNR Coal Sales, Inc	IL, WV	Barge	113,312	. 111,723	\$40.39-IL, \$39.39-WV
J16017C	ACNR Coal Sales, Inc	W-KY	Rail, Barge	-	115,062	\$41.60
J17004B	ACNR Coal Sales, Inc	IL	Barge	463,913	958,333	\$43.40-IL, \$42.40-WV
J18002C	ACNR Coal Sales, Inc	W-KY	Rail, Barge	172,462	271,217	\$44.98-B, \$44.98-R
J21002	ACNR Coal Sales, Inc	W-KY	Rail, Barge	-	333,333	\$42.15
J14001B	Alliance Coal LLC	W-KY	Barge	22,345	66,667	\$39.45
J18003	Alliance Coal LLC	W-KY	Barge	111,909	166,667	\$42.42
J18009	Alliance Coal LLC	W-KY	Barge	370,329	761,667	\$38.93-KY, \$41.15-WV
J19001	Alliance Coal LLC	W-KY	Rail	-	166,667	\$41.00-Dotiki; \$42.10 Warrior
J21003	Alliance Coal LLC	W-KY	Rail	-	333,333	\$40.95
J21004	Alliance Coal LLC	W-KY, WV	Barge	327,238	833,333	\$39.05-KY, \$41.55-WV
J21010	Alliance Coal LLC	W-KY	Barge	-	56,000	\$38.10
J20001B	Alpha Thermal Coal Sales	PA	Barge	118,299	140,119	\$40.60
J20002	Arch Coal Sales Company Inc.	WY	Barge	221,603	273,000	\$12.80
J20024	Coal Network LLC	multi-state	Barge	14,463	65,000	\$25.00
J20001	Contura Coal Sales LLC	PA	Barge	59,883	77,898	\$40.60
J18005	Knight Hawk Coal, LLC	IL	Barge	63,066	83,333	\$36.98
J21001	Knight Hawk Coal, LLC	IL	Barge		166,667	\$36.92
J21022	Knight Hawk Coal, LLC	IL	Barge	-	27,778	\$33.15
J19003	Peabody COALSALES LLC	IN	Barge, Rail	224,908	244,667	\$41.10-B, \$38.80-R
J20006	Western Kentucky Minerals, Inc	W-KY	Barge	30,637	167,143	\$40.36
J19002	White Stallion Energy LLC	IL	Barge	-	180,000	\$43.77
				2,419,012		
	rement is a ratable volume for combined LG&		ipments			
Filces vary by	source/transportation type. Prices as of 4/3	0/21			Attachment t	o Response to Question No. 2
						BILLITER
						Page 1 of 2

November 1	L, 2020 through April 30, 2021					
(a)	(b)	(c)	(d)	(e)	(f)	(g)
		Location of	Delivery	Actual Quantity	Tonnage	Current Price**
Contract/PO	Supplier	Production Facility	Method	Received	Requirement*	(\$/ton)
J16006B	ACNR Coal Sales, Inc	IL, WV	Barge	133,412	111,723	\$40.39-IL, \$39.39-W∖
J16017C	ACNR Coal Sales, Inc	W-KY	Rail, Barge	63,988	115,062	\$41.60
J17004B	ACNR Coal Sales, Inc	IL	Barge	883,260	958,333	\$43.40-IL, \$42.40-WV
J18002C	ACNR Coal Sales, Inc	W-KY	Rail, Barge	354,018	271,217	\$44.98-B, \$44.98-F
J21002	ACNR Coal Sales, Inc	W-KY	Rail, Barge	284,306	333,333	\$42.15
J14001B	Alliance Coal LLC	W-KY	Barge	83,243	66,667	\$39.45
J18003	Alliance Coal LLC	W-KY	Barge	198,284	166,667	\$42.42
J18009	Alliance Coal LLC	W-KY	Barge	832,838	761,667	\$38.93-KY, \$41.15-WV
J19001	Alliance Coal LLC	W-KY	Rail	148,218	166,667	\$41.00-Dotiki; \$42.10 Warrio
J21003	Alliance Coal LLC	W-KY	Rail	317,081	333,333	\$40.95
J21004	Alliance Coal LLC	W-KY, WV	Barge	747,525	833,333	\$39.05-KY, \$41.55-WV
J21010	Alliance Coal LLC	W-KY	Barge	43,701	56,000	\$38.10
J20001B	Alpha Thermal Coal Sales	PA	Barge	118,299	140,119	\$40.60
J20002	Arch Coal Sales Company Inc.	WY	Barge	221,603	273,000	\$12.80
J20024	Coal Network LLC	multi-state	Barge	51,103	65,000	\$25.00
J20001	Contura Coal Sales LLC	PA	Barge	59,883	77,898	\$40.60
J18005	Knight Hawk Coal, LLC	IL	Barge	106,420	83,333	\$36.98
J21001	Knight Hawk Coal, LLC	IL	Barge	159,602	166,667	\$36.92
J21022	Knight Hawk Coal, LLC	IL	Barge	16,210	27,778	\$33.15
J19003	Peabody COALSALES LLC	IN	Barge, Rail	224,908	244,667	\$41.10-B, \$38.80-F
J20006	Western Kentucky Minerals, Inc	W-KY	Barge	134,070	167,143	\$40.36
J19002	White Stallion Energy LLC	IL	Barge	14,200	180,000	\$43.77
				E 400 171	5 500 007	
				5,196,171	5,599,607	
0 1	rement is a ratable volume for combined LG& source/transportation type. Prices as of 4/3		ipments		Attackmart t	o Response to Question No. 2
					Attachment t	
						BILLITER Page 2 of 2

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 3

Responding Witness: Delbert Billiter

- Q-3. As of the last day of the review period:
 - a. State the coal inventory level in tons and in number of days' supply. Provide this information by generating station and in the aggregate.
 - b. Describe the criteria used to determine number of days' supply.
 - c. State the target coal inventory level for each generating station and for the total system.
 - d. If actual coal inventory exceeds the target inventory by ten days' supply, state the reasons for the excess inventory.
 - e. State whether any significant changes in the current coal inventory target are expected within the next 12 months. If so, state the expected change and the reasons for this change.

A-3.

a. As of April 30, 2021:

EW Brown	85,552 Tons; 21 Days	Target 33-63 Days
Ghent ¹	545,687 Tons; 26 Days	Target 20-40 Days
Trimble County ^{2,3}	236,492 Tons; 34 Days	Target 21-43 Days
Total	867,730 Tons; 27 Days	Target 23-45 Days

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

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

³ Trimble County coal inventory tons are KU's allocated ownership of both PRB and High Sulfur coals used for Trimble County Unit 2. The days in inventory and target range are calculated on a combined basis regardless of ownership.

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

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

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

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 4

Responding Witness: Delbert Billiter

- Q-4. List each written coal supply solicitation issued during the period under review.
 - a. For each solicitation, provide the date of the solicitation, the type of solicitation (contract or spot), the quantities solicited, a general description of the quality of coal solicited, the 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 ranked the proposals. (This document should identify all vendors who made offers.) State the reasons for each selection. For each lowest-cost bid not selected, explain why the bid was not selected.

A-4.

a. SOLICITATION 1

Date:	March 22, 2021
Contract/Spot:	Contract or Spot
Quantities:	No minimum or maximum specified
Quality:	Suitable for KU's Ghent Station, LG&E's Mill
	Creek Station, and KU's and LG&E's Trimble
	County Station
Period:	July 1, 2021 through December 31, 2021 – Spot
	2022 and beyond – Contract
Generating Units:	All units at Ghent, Trimble County and Mill Creek
	Station

b. Number of vendors sent a solicitation: 64
Number of vendors responded: 7 companies / 7 offers
Selected vendor(s): The vendors selected were based upon the lowest evaluated delivered cost, operational and environmental requirements of the

coal units, and other factors impacting coal supply reliability as noted on the attached bid evaluation sheets.

<u>High Sulfur Coal - Spot</u> Alliance Coal, LLC – J21027

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

The entire attachment is Confidential and provided separately under seal.

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 5

Responding Witness: Delbert Billiter

- Q-5. List each oral coal supply solicitation issued during the period under review.
 - a. For each solicitation, state why the solicitation was not written, the date(s) of the solicitation, the quantities solicited, a general description of the quality of coal solicited, the 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 tabulation sheet or other document that ranks the proposals. (This document should identify all vendors who made offers.) State the reasons for each selection. For each lowest-cost bid not selected, explain why the bid was not selected
- A-5. There were no oral coal-supply solicitations during the period under review.

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 6

Responding Witness: Charles Schram

- Q-6. For the period under review, list each vendor from whom natural gas was purchased for generation and the quantities and the nature of each purchase (i.e., spot or contract)
- A-6. See attached for the list of vendors, associated quantities, and the nature of each natural gas purchase.

Vendor	Type ¹	MMBTU
BP Energy Company	Spot	151,700
Castleton Commodities Merchant Trading L.P.	Spot	31,100
CIMA Energy, LP	Spot	30,000
Colonial Energy, Inc.	Spot	2,100
ConocoPhillips Company	Spot	1,000
Direct Energy Business Marketing, LLC	Spot	15,000
DTE Energy Trading, Inc.	Spot	149,500
Eco-Energy Natural Gas, LLC	Spot	118,900
Engie Energy Marketing NA, Inc.	Spot	103,200
Exelon Generation Company, LLC	Spot	52,800
J. Aron & Company LLC	Spot	8,800
KM Ventures, LLC (dba Freedom Energy)	Spot	54,000
Macquarie Energy, LLC	Spot	56,300
Mercuria Energy America, LLC	Spot	15,000
NextEra Energy Marketing, LLC	Spot	378,992
NJR Energy Services Company	Spot	10,000
Ovintiv Marketing Inc.	Spot	18,600
Sequent Energy Management, L.P.	Spot	39,000
Shell Energy North America (US), L.P.	Spot	483,899
Southwest Energy, L.P.	Spot	71,300
Spire Marketing Inc.	Spot	16,600
Spotlight Energy, LLC	Spot	111,500
Symmetry Energy Solutions, LLC	Spot	10,000
Tenaska Marketing Ventures	Spot	8,150,317
Tennessee Valley Authority	Spot	49,998
Texla Energy Management, Inc.	Spot	36,300
TrailStone Energy Marketing, LLC	Spot	26,500
Twin Eagle Resource Management, LLC	Spot	136,800
Uniper Global Commodities North America LLC	Spot	75,000
United Energy Trading, LLC	Spot	337,141
Wells Fargo Commodities, LLC	Spot	24,900
Columbia Gas of Kentucky, Inc.	GSO Customer ²	269
LG&E Gas Supply	Special Contract ³	153,471
EDF Trading North America, LLC	Forward	3,538,879
Engie Energy Marketing NA, Inc.	Forward	1,509,997
Exelon Generation Company, LLC	Forward	299,431
J. Aron & Company LLC	Forward	602,029
NextEra Energy Marketing, LLC	Forward	309,366
Sequent Energy Management, L.P.	Forward	610,000
Spire Marketing Inc.	Forward	1,196,769
Twin Eagle Resource Management, LLC	Forward	919,994

Grand Total

19,906,452

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

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

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

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 7

Responding Witness: Charles Schram

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

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 8

Responding Witness: Delbert Billiter / Charles Schram

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

There have been no changes to the physical hedging practices or guidelines since the previous review proceeding.

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 9

Responding Witness: Delbert Billiter / Charles Schram

- Q-9. State whether KU has audited any of its fuel or transportation contracts during the period under review. If so, for each audited contract:
 - a. Identify the contract;
 - b. Identify the auditor; and
 - c. State the results of the audit, and describe the actions that KU took as a result of the audit.
- A-9. No. The Company has not conducted any financial audits of fuel or transportation contracts.

The Company's Manager Fuels Technical Services or the Company'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, the Company employees may visit a vendor as needed to address problems and issues at any time.

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 10

Responding Witness: Delbert Billiter / Charles Schram

Q-10.

- a. State whether KU is currently involved in any litigation with its current or former fuel suppliers or transportation vendors. If yes, for each litigation:
 - (1) Identify the supplier or vendor;
 - (2) Identify the contract involved;
 - (3) State the potential liability or recovery to KU;
 - (4) List the issues presented; and

(5) Provide a copy of the complaint or other legal pleading that initiated the litigation and any answers or counterclaims. If a copy has previously been filed with the Commission, provide the date on which it was filed and the case in which it was filed.

- b. State the current status of all litigation with suppliers or vendors.
- A-10. The Company is not involved in direct litigation with a supplier but is involved in a Chapter 11 bankruptcy process with two of its coal suppliers impacting one contract.

a.

- (1) Eagle River Coal, LLC and White Stallion Energy, LLC
- (2) Coal Supply Agreement J19002 between LG&E and KU and Eagle River Coal, LLC and White Stallion Energy, LLC (dated as of July 20, 2018, as amended)
- (3) The Company would have no liability other than continuing to perform under the terms of J19002. If Eagle River Coal, LLC and White Stallion

Energy, LLC are unsuccessful in an approved bankruptcy reorganization or sale and the contract is ultimately terminated, The Company would enter the market for replacement coal.

- (4) White Stallion Energy, LLC filed for Chapter 11 relief in U.S. Bankruptcy Court for the District of Delaware (case no. 20-13037) on December 2, 2020 and Eagle River Coal, LLC filed for Chapter 11 relief (case no. 21-10118) in the same court on January 26, 2021. The cases are jointly administered under the White Stallion Energy, LLC docket.
- (5) Copies of court pleadings and documents are available on-line via Prime Clerk (Duff & Phelps), the debtor's public bankruptcy service provider, at the link:

https://cases.primeclerk.com/WhiteStallion/Home-DocketInfo

b. Eagle River Coal, LLC and White Stallion Energy, LLC have idled all operations while they evaluate options and solicit bids on their assets.

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 11

Responding Witness: Delbert Billiter / Charles Schram

Q-11.

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

A-11.

- a. During the period under review, there were no changes to The Corporate Fuels and By-Products Procurement Procedures for coal or the Power Supply Commodity Policy Natural Gas Fuel for Generation.
- b. The Corporate Fuels and By-Products Procurement Procedures were last updated April 1, 2017 and were provided to the Commission in Case No. 2017-00284 in response to Question No. 1-15.

The Power Supply Commodity Policy – Natural Gas Fuel for Generation was last updated January 1, 2020 and was provided to the Commission in Case No. 2020-00247 in response to Question No. 1-11.

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 12

Responding Witness: Stuart Wilson

Q-12. For the period under review, list all firm power commitments for (a) purchases and (b) sales. This list shall identify the electric utility, the amount of commitment in megawatts, and the purpose of the commitment (i.e., peaking, emergency).

A-12.

a. Firm Purchases:

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

Utility	Period	Companies' Amt.	KU Portion (MW)	Purpose
OVEC	Nov 2020	~ 153	~ 47	Baseload
OVEC	Dec 2020	~ 158	~ 49	Baseload
OVEC	Jan 2021	~ 158	~ 49	Baseload
OVEC	Feb 2021	~ 158	~ 49	Baseload
OVEC	Mar 2021	~ 126	~ 39	Baseload
OVEC	Apr 2021	~ 92	~ 28	Baseload
Utility	Period	Companies' Amt.	KU Portion (MW)	Purpose
OVEC	Nov 2020	~ 153	~ 47	Baseload
OVEC	Dec 2020	~ 158	~ 49	Baseload
OVEC	Jan 2021	~ 158	~ 49	Baseload
OVEC	Feb 2021	~ 158	~ 49	Baseload
OVEC	Mar 2021	~ 126	~ 39	Baseload
OVEC	Apr 2021	~ 92	~ 28	Baseload

b. Firm Sales: None.

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 13

Responding Witness: Andrea Fackler

- Q-13. Provide a monthly billing summary of sales to all electric utilities for the period under review.
- A-13. See attached.



				Billing Components									
	Type of			Type of					Fuel		Other		Total
Company		Transaction	KWH	Demand(\$)		Charges(\$)		Charges(\$)		Charges(\$)			
Sales													
EVERGY KANSAS CENTRAL, INC.	EVGY	Economy	55,000		\$	1,849.27	\$	882.93	\$	2,732.20			
EXELON GENERATION COMPANY, LLC	EXEL	Economy	66,000		\$	1,499.32	\$	715.85	\$	2,215.17			
ENERGY IMBALANCE	IMBL	Economy	612,000		\$	12,783.29	\$	6,103.37	\$	18,886.66			
MACQUARIECOOK	MACQUARIE	Economy	2,217,000		\$	56,059.79	\$	26,765.84	\$	82,825.63			
MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.	MISO	Economy	1,395,000		\$	32,580.84	\$	15,555.78	\$	48,136.62			
PJM INTERCONNECTION ASSOCIATION	PJM	Economy	1,024,000		\$	22,083.68	\$	10,543.89	\$	32,627.57			
RAINBOW ENERGY MARKETING CORP	REMC	Economy	152,000		\$	3,548.36	\$	1,694.18	\$	5,242.54			
TENNESSEE VALLEY AUTHORITY	TVA	Economy	415,000		\$	9,788.33	\$	4,673.46	\$	14,461.79			
LOUISVILLE GAS & ELECTRIC	LGE	Economy	96,617,000		\$	1,943,079.95	\$	1,374.75	\$	1,944,454.70			
Total Sales			102,553,000	\$ -	\$	2,083,272.83	\$	68,310.05	\$	2,151,582.88			



			Billing Components						
			Fuel		Other		Total		
KWH	Demand(\$)	(Charges(\$)		Charges(\$)		Charges(\$)		
11,000		\$	284.76	\$	163.52	\$	448.28		
274,000		\$	6,803.03	\$	3,856.68	\$	10,659.71		
65,000		\$	1,539.88	\$	854.97	\$	2,394.85		
28,000		\$	493.86	\$	283.57	\$	777.43		
17,000		\$	2,233.83	\$	(573.62)	\$	1,660.21		
1,518,000		\$	38,252.14	\$	20,647.14	\$	58,899.28		
808,000		\$	19,495.85	\$	10,509.33	\$	30,005.18		
1,849,000		\$	39,627.83	\$	22,338.77	\$	61,966.60		
388,000		\$	10,769.99	\$	6,109.65	\$	16,879.64		
213,000		\$	5,795.08	\$	3,123.30	\$	8,918.38		
29,546,000		\$	598,817.61	\$	1,379.40	\$	600,197.01		
34,717,000	\$ -	\$	724,113.87	\$	68,692.71	\$	792,806.57		
	$\begin{array}{c} 11,000\\ 274,000\\ 65,000\\ 28,000\\ 17,000\\ 1,518,000\\ 808,000\\ 1,849,000\\ 388,000\\ 213,000\\ 29,546,000\\ \end{array}$	11,000 274,000 65,000 28,000 17,000 1,518,000 808,000 1,849,000 388,000 213,000 29,546,000	11,000 \$ 274,000 \$ 65,000 \$ 28,000 \$ 17,000 \$ 1,518,000 \$ 808,000 \$ 1,849,000 \$ 388,000 \$ 213,000 \$ 29,546,000 \$	KWH Demand(\$) Charges(\$) 11,000 \$ 284.76 274,000 \$ 6,803.03 65,000 \$ 1,539.88 28,000 \$ 493.86 17,000 \$ 2,233.83 1,518,000 \$ 38,252.14 808,000 \$ 19,495.85 1,849,000 \$ 39,627.83 388,000 \$ 10,769.99 213,000 \$ 5,795.08 29,546,000 \$ 598,817.61	KWH Demand(\$) Charges(\$) 11,000 \$ 284.76 \$ 274,000 \$ 6,803.03 \$ 65,000 \$ 1,539.88 \$ 28,000 \$ 493.86 \$ 17,000 \$ 2,233.83 \$ 1,518,000 \$ 38,252.14 \$ 808,000 \$ 19,495.85 \$ 1,849,000 \$ 39,627.83 \$ 388,000 \$ 10,769.99 \$ 213,000 \$ 5,795.08 \$ 29,546,000 \$ 598,817.61 \$	KWH Demand(\$) Charges(\$) Charges(\$) 11,000 \$ 284.76 \$ 163.52 274,000 \$ 6,803.03 \$ 3,856.68 65,000 \$ 1,539.88 \$ 854.97 28,000 \$ 493.86 \$ 283.57 17,000 \$ 2,233.83 \$ (573.62) 1,518,000 \$ 38,252.14 \$ 20,647.14 808,000 \$ 19,495.85 \$ 10,509.33 1,849,000 \$ 39,627.83 \$ 22,338.77 388,000 \$ 10,769.99 \$ 6,109.65 213,000 \$ 5,795.08 \$ 3,123.30 29,546,000 \$ 598,817.61 \$ 1,379.40	KWHDemand(\$)Charges(\$)Charges(\$)11,000\$284.76\$163.52\$274,000\$6,803.03\$3,856.68\$65,000\$1,539.88\$854.97\$28,000\$493.86\$283.57\$17,000\$2,233.83\$(573.62)\$1,518,000\$38,252.14\$20,647.14\$808,000\$19,495.85\$10,509.33\$1,849,000\$39,627.83\$22,338.77\$388,000\$10,769.99\$6,109.65\$213,000\$\$598,817.61\$1,379.40\$		



·				Billing Components										
	Type of			Type of						Fuel	Other			Total
Company		Transaction	KWH	Demai	nd(\$)	(Charges(\$)		Charges(\$)		Charges(\$)			
Sales														
EVERGY KANSAS CENTRAL, INC.	EVGY	Economy	34,000			\$	782.11	\$	434.27	\$	1,216.38			
EXELON GENERATION COMPANY, LLC	EXEL	Economy	1,000			\$	22.61	\$	12.56	\$	35.17			
ENERGY IMBALANCE	IMBL	Economy	12,000			\$	205.36	\$	(246.18)	\$	(40.82)			
MACQUARIECOOK	MACQUARIE	Economy	43,000			\$	984.91	\$	546.88	\$	1,531.79			
MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.	MISO	Economy	41,000			\$	904.55	\$	502.25	\$	1,406.80			
PJM INTERCONNECTION ASSOCIATION	PJM	Economy	32,000			\$	568.98	\$	315.93	\$	884.91			
RAINBOW ENERGY MARKETING CORP	REMC	Economy	1,000			\$	22.60	\$	12.55	\$	35.15			
TENNESSEE VALLEY AUTHORITY	TVA	Economy	7,000			\$	163.52	\$	90.80	\$	254.32			
LOUISVILLE GAS & ELECTRIC	LGE	Economy	9,681,000			\$	183,239.54	\$	269.98	\$	183,509.52			
Total Sales			9,852,000	\$	-	\$	186,894.18	\$	1,939.04	\$	188,833.22			



				Billing Components							
	Type of				Fuel		Other		Total		
<u>Company</u>		Transaction	KWH	Demand(\$)		Charges(\$)		Charges(\$)		Charges(\$)	
Sales											
DYNASTY POWER, INC.	DYNASTYPWR	Economy	130,000		\$	2,778.53	\$	3,723.79	\$	6,502.32	
EVERGY KANSAS CENTRAL, INC.	EVGY	Economy	1,191,000		\$	33,586.70	\$	45,013.05	\$	78,599.75	
EXELON GENERATION COMPANY, LLC	EXEL	Economy	226,000		\$	10,409.42	\$	13,950.75	\$	24,360.17	
ENERGY IMBALANCE	IMBL	Economy	111,000		\$	1,929.89	\$	2,503.79	\$	4,433.68	
MACQUARIECOOK	MACQUARIE	Economy	1,311,000		\$	51,716.90	\$	69,311.22	\$	121,028.12	
MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.	MISO	Economy	5,639,000		\$	169,618.64	\$	227,323.67	\$	396,942.31	
PJM INTERCONNECTION ASSOCIATION	PJM	Economy	9,943,000		\$	284,761.30	\$	381,638.36	\$	666,399.66	
RAINBOW ENERGY MARKETING CORP	REMC	Economy	394,000		\$	17,202.49	\$	23,054.84	\$	40,257.33	
THE ENERGY AUTHORITY	TEA	Economy	3,000		\$	46.88	\$	72.06	\$	118.94	
TENNESSEE VALLEY AUTHORITY	TVA	Economy	1,689,000		\$	38,591.66	\$	51,720.70	\$	90,312.36	
LOUISVILLE GAS & ELECTRIC	LGE	Economy	65,395,000		\$	1,665,671.18	\$	18,670.84	\$	1,684,342.02	
Total Sales		-	86,032,000	\$-	\$	2,276,313.59	\$	836,983.07	\$	3,113,296.66	



						Billing Componen	ts		
		Type of				Fuel		Other	Total
Company		Transaction	KWH	Demand(\$)		Charges(\$)		Charges(\$)	 Charges(\$)
Sales									
INDIANA MUNICIPAL POWER AGENCY	IMPA	Economy	149,000		\$	2,965.72	\$	1,668.75	\$ 4,634.47
ENERGY IMBALANCE	IMBL	Economy	944,000		\$	15,285.80	\$	8,492.37	\$ 23,778.17
MACQUARIECOOK	MACQUARIE	Economy	492,000		\$	10,647.53	\$	9,214.37	\$ 19,861.90
MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.	MISO	Economy	1,708,000		\$	40,058.16	\$	19,316.72	\$ 59,374.88
PJM INTERCONNECTION ASSOCIATION	PJM	Economy	382,000		\$	6,066.62	\$	3,413.55	\$ 9,480.17
RAINBOW ENERGY MARKETING CORP	REMC	Economy	269,000		\$	5,987.60	\$	3,369.10	\$ 9,356.70
THE ENERGY AUTHORITY	TEA	Economy	69,000		\$	1,374.81	\$	773.57	\$ 2,148.38
TENNESSEE VALLEY AUTHORITY	TVA	Economy	1,306,000		\$	33,235.69	\$	18,701.06	\$ 51,936.75
LOUISVILLE GAS & ELECTRIC	LGE	Economy	141,712,000		\$	2,705,860.28	\$	61.71	\$ 2,705,921.99
Total Sales			147,031,000	\$ -	\$	2,821,482.21	\$	65,011.20	\$ 2,886,493.41
					_				



				Billing Components							
		Type of					Fuel		Other		Total
Company		Transaction	KWH	De	mand(\$)	(Charges(\$)		Charges(\$)		Charges(\$)
<u>Sales</u>											
ENERGY IMBALANCE	IMBL	Economy	1,000			\$	27.32	\$	(2.33)	\$	24.99
MACQUARIECOOK	MACQUARIE	Economy	8,000			\$	252.73	\$	753.12	\$	1,005.85
MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.	MISO	Economy	6,000			\$	163.63	\$	563.30	\$	726.93
PJM INTERCONNECTION ASSOCIATION	PJM	Economy	15,000			\$	439.03	\$	1,511.31	\$	1,950.34
LOUISVILLE GAS & ELECTRIC	LGE	Economy	5,323,000			\$	141,599.18	\$	3,820.35	\$	145,419.53
Total Sales			5,353,000	\$	-	\$	142,481.89	\$	6,645.75	\$	149,127.64

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 14

Responding Witness: Andrea Fackler

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

a. Intersystem sales when using a third-party transmission system; and

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

A-14. Line losses related to inter-system sales are calculated using a loss factor of 0.5% whether the inter-system sale requires a third-party transmission system or not. This practice is consistent with the Commission's June 7, 2013 Amended Order in Case No. 2012-00552⁴.

⁴ <u>Electronic Examination of the Application of the Fuel Adjustment Clause of Kentucky Utilities Company</u> <u>From November 1, 2010 Through October 31, 2012</u>, Kentucky Public Service Commission, Case No. 2012-00552, filed February 13, 2013, Amended Order June 7, 2013

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 15

Responding Witness: Michael Drake

- Q-15. Provide a list, in chronological order, showing by unit any scheduled, actual, and forced outages for the period under review.
- A-15. See attached.

Kentucky Utilities Company

November 2020 through April 2021

Unit and Outage Type		Sched	uled	A	HOURS OF	DURATION	REASON FOR DEVIATION FROM SCHEDULED MAINTENANCE		
(F=Forced; S=Scheduled)		FROM	то	FROM	то	Scheduled	Actual*	OR REASON FOR FORCED OUTAGE AS APPROPRIATE	
E. W. Brown Unit 3 - Coal - 413 MW	S	11/7/2020 0:00	12/6/2020 0:00	11/8/2020 10:41	12/7/2020 2:16	696:00	687:35	Boiler inspection	
In-service July 1971	F			12/7/2020 15:51	12/10/2020 5:22		61:31	Boiler reheat tube leak	
	F			12/10/2020 7:47	12/11/2020 1:02		17:15	Boiler Maintenance - Door Gasket Leak	
	F			12/11/2020 2:40	12/11/2020 14:16		11:36	Boiler Maintenance - Door Gasket Leak	
	F			12/14/2020 20:20	12/16/2020 7:59		35:39	Boiler Maintenance - Door Gasket Leak	
	S	1/2/2021 8:30	1/8/2021 0:01	1/2/2021 8:30	1/8/2021 0:01	135:31	135:31	Flue Gas Desulfurization (FGD) Reactor Module Door Repair	
	S	1/8/2021 0:01	1/8/2021 19:15	1/8/2021 0:01	1/8/2021 19:15	19:14	19:14	Boiler Maintenance - Tube Repair	
	F			3/2/2021 8:41	3/4/2021 10:00		49:19	Boiler reheat tube leak	
	F			4/20/2021 12:39	4/22/2021 16:58		52:19	Air Heater Guide Bearing Replacement	
	S	4/22/2021 16:58	4/25/2021 3:05	4/22/2021 16:58	4/25/2021 3:05	58:07	58:07	Bottom Ash Hopper Maintenance	
Ghent Unit 1 - Coal - 479 MW	S	12/18/2020 22:29	12/21/2020 2:00	12/18/2020 22:29	12/21/2020 2:00	51:31	51:31	Air heater wash	
In-service February 1974	S	1/16/2021 11:45	1/17/2021 3:16	1/16/2021 11:45	1/17/2021 3:16	15:31	15:31	Low Pressure Service Water System Repair	
	S	3/6/2021 0:00	5/9/2021 0:00	3/5/2021 23:26	5/10/2021 0:00	1536:00	1560:34	Major turbine overhaul	
Ghent Unit 2 - Coal - 486 MW	F			12/14/2020 11:21	12/15/2020 15:18		27:57	Boiler reheat tube leak	
In-service April 1977									
Ghent Unit 3 - Coal - 476 MW	1	No outages > or = 6 hours							
In-service May 1981									
Ghent Unit 4 - Coal - 478 MW	S	4/3/2021 0:00	5/9/2021 0:00	4/2/2021 18:36	5/6/2021 11:31	864:00	808:55	Reheat tube replacement	
In-service August 1984									
Trimble County Unit 2 - Coal - 570 MW	S	10/31/2020 16:01	11/4/2020 5:29	10/31/2020 16:01	11/4/2020 5:29	85:28		Turbine Main Stop Valves - Fine Screens	
In-service January 2011 75% ownership share of 732 MW jointly owned with LG&E	F			11/6/2020 3:57	11/7/2020 8:28			High Pressure Turbine Exhaust Temperature Exceedance	
75% ownersnip share of 752 www.jointry owned with Edde	F			1/25/2021 18:30	1/31/2021 13:07			Hot Reheat Steam Leak	
	S	3/27/2021 0:00	5/2/2021 0:00	3/27/2021 2:25	4/23/2021 3:50	864:00		Turbine stop valve repair	
	F			4/24/2021 15:30	4/28/2021 13:15			Boiler Superheater Tube Leak	
Cane Run Unit 7 - Gas - 683 MW	S	10/30/2020 0:00	11/9/2020 0:00	10/31/2020 0:59	11/9/2020 8:56	240:00		Exhaust Duct Inspection	
In-service June 2015 Jointly owned with LG&E	S	11/9/2020 22:09	11/10/2020 13:46	11/9/2020 22:09	11/10/2020 13:46	15:37		Controls System - startup controls	
Jointly owned with LG&E	S	11/10/2020 22:22	11/11/2020 9:03	11/10/2020 22:22	11/11/2020 9:03	10:41	10:41	Controls System - startup controls	
	S	11/11/2020 21:15	11/12/2020 10:57	11/11/2020 21:15	11/12/2020 10:57	13:42		Controls System - startup controls	
	F			11/12/2020 23:20	11/13/2020 13:58		14:38	Main Steam Isolation Valve Leak	
	F			11/13/2020 18:19	11/15/2020 17:36		47:17	Main Steam Isolation Valve Leak	
	S	1/10/2021 11:18	1/10/2021 20:45	1/10/2021 11:18	1/10/2021 20:45	9:27	9:27	Medium voltage switchgear testing	
	S	2/3/2021 23:19	2/5/2021 22:40	2/3/2021 23:19	2/5/2021 22:40	47:21	47:21	reheat outlet stop valve repair	
E. W. Brown Unit 5 - Gas CT - 130 MW	S	4/6/2021 6:44	4/6/2021 13:08	4/6/2021 6:44	4/6/2021 13:08	6:24	6:24	Fuel Gas System	
In-service June 2001									
Jointly owned with LG&E		10/17/000	44.4.000	10/10/0007 7 7 7	44 /0 /00000000000000000000000000000000		405.55		
E. W. Brown Unit 6 - Gas CT - 171 MW	S	10/17/2020 0:00	11/1/2020 0:00	10/16/2020 6:00	11/2/2020 0:00	360:00		Fuel Gas System	
In-service August 1999 Jointly owned with LG&E	S	11/2/2020 0:00	11/6/2020 17:19	11/2/2020 0:00	11/6/2020 17:19	113:19		Generator Exciter Controls	
Jointy owned with LOCE	S	11/6/2020 18:53	11/7/2020 12:12	11/6/2020 18:53	11/7/2020 12:12	17:19		Generator Exciter Controls	
	F			1/18/2021 6:41	1/21/2021 16:34		81:53	Exciter controls	

Unit and Outage Type		Sched	uled	Actual*			DURATION	REASON FOR DEVIATION FROM SCHEDULED MAINTENANCE
(F=Forced; S=Scheduled)		FROM TO		FROM	Scheduled	Actual*	OR REASON FOR FORCED OUTAGE AS APPROPRIATE	
E. W. Brown Unit 7 - Gas CT - 171 MW	S	10/17/2020 0:00	11/1/2020 0:00	10/16/2020 6:00	TO 11/2/2020 0:00	360:00		Fuel Gas System
In-service August 1999	s	11/2/2020 0:00	11/5/2020 18:37	11/2/2020 0:00	11/5/2020 18:37	90:37		Generator Exciter Controls
Jointly owned with LG&E	S	11/5/2020 22:22	11/6/2020 10:11	11/5/2020 22:22	11/6/2020 10:11	11:49		Generator Exciter Controls
-	S	11/6/2020 11:59	11/6/2020 19:13	11/6/2020 11:59	11/6/2020 19:13	7:14		Generator Exciter Controls
	F	11/6/2020 11:59	11/6/2020 19:13	12/3/2020 6:26			8:28	
		1 (01 (0001 7 00	1/01/0001 15 01		12/3/2020 14:54			
	S	1/21/2021 7:00	1/21/2021 16:34	1/21/2021 7:00	1/21/2021 16:34	9:34		Exciter controls
E. W. Brown Unit 8 - Gas CT - 128 MW	S			3/22/2021 0:01	3/26/2021 9:15	0:00	105:14	Borescope Inspection
In-service February 1995				2/26/2021 0.15	2/26/2024 46 56	0.00	7.44	
E. W. Brown Unit 9 - Gas CT - 138 MW In-service January 1995	S			3/26/2021 9:15	3/26/2021 16:56	0:00	7:41	Borescope Inspection
E. W. Brown Unit 10 - Gas CT - 138 MW	F			2/9/2021 15:33	2/11/2021 19:00		E1.07	Fire Protection System Maintenance
In-service December 1995				2/9/2021 15.55	2/11/2021 19.00		51.27	
E. W. Brown Unit 11 - Gas CT - 128 MW	F			12/26/2020 4:34	12/26/2020 13:16		8:42	Starting System - Excitation
In-service May 1996				, , , , , ,	, ,			
Haefling Unit 1 - Gas CT - 14 MW	No	o outages > or = 6 hours						
In-service October 1970								
Haefling Unit 2 - Gas CT - 14 MW	F			12/11/2020 11:28	12/14/2020 12:41		73:13	Fuel piping and valve maintenance
In-service October 1970								
Paddys Run Unit 13 - Gas CT - 175 MW	S	12/5/2020 0:00	12/20/2020 0:00	12/4/2020 6:15	12/20/2020 18:07	360:00	395:52	Compressor Inspection
In-service June 2001	F			12/20/2020 18:07	12/21/2020 22:57		28:50	Startup System - turning gear
Jointly owned with LG&E	F			1/29/2021 5:40	1/29/2021 15:14		9:34	
Trimble County Unit 5 - Gas CT - 179 MW	S	11/7/2020 0:00	12/31/2020 0:00	11/7/2020 0:00	1/1/2021 0:00	1296:00	1320:00	Major Overhaul
In-service May 2002	s	1/1/2021 0:00	4/25/2021 0:00	1/1/2021 0:00	4/15/2021 7:08	2736:00	2503:08	
Jointly owned with LG&E	s	4/15/2021 20:14	4/17/2021 7:46	4/15/2021 20:14	4/17/2021 7:46	35:32	35:32	Major Overhaul - startup and commissioning
	S	4/17/2021 12:15	4/22/2021 10:00	4/17/2021 12:15	4/22/2021 10:00	117:45		Major overhaul - testing and commissioning
	S	4/22/2021 10:00	5/10/2021 7:54	4/22/2021 10:00	5/10/2021 7:54	429:54		Major overhaul - testing and commissioning
Trimble County Unit 6 - Gas CT - 179 MW	S	11/7/2020 3:00	11/7/2020 13:27	11/7/2020 3:00	11/7/2020 13:27	10:27		Starting System
In-service May 2002	S	11/14/2020 0:00	11/22/2020 0:00	11/13/2020 23:25	11/22/2020 12:00	192:00		Transmission line maintenance
Jointly owned with LG&E	S	12/4/2020 4:00	12/4/2020 17:28	12/4/2020 4:00	12/4/2020 17:28	13:28		Controls System
	5	2/5/2021 2:00	2/8/2021 3:22	2/5/2021 2:00	2/8/2021 3:22	73:22		Inlet guide vane actuator
	S	2/24/2021 4:48	2/24/2021 17:00	2/24/2021 4:48	2/0/2021 3.22	12:12		Inlet guide vane actuator
	S							-
	S	3/1/2021 6:30	3/1/2021 17:01	3/1/2021 6:30	3/1/2021 17:01	10:31		Inlet guide vane actuator
	S	3/1/2021 17:01	3/2/2021 17:28	3/1/2021 17:01	3/2/2021 17:28	24:27		Inlet guide vane actuator
	S	3/11/2021 4:00	3/11/2021 13:18	3/11/2021 4:00	3/11/2021 13:18			Inlet guide vane actuator
	S	3/27/2021 0:00	4/18/2021 0:00	3/26/2021 21:30	4/5/2021 7:00	528:00		Lube Oil System Maintenace
	S	4/5/2021 7:00	4/6/2021 7:18	4/5/2021 7:00	4/6/2021 7:18			Lube Oil System Maintenace
Trimble County Unit 7 - Gas CT - 179 MW	S	11/14/2020 0:00	11/22/2020 0:00	11/13/2020 23:25	11/22/2020 13:19			Transmission line maintenance
In-service June 2004	S	12/5/2020 6:00	12/5/2020 18:08	12/5/2020 6:00	12/5/2020 18:08	12:08	12:08	Controls System
Jointly owned with LG&E	S	4/1/2021 5:30	4/1/2021 15:40	4/1/2021 5:30	4/1/2021 15:40	10:10	10:10	Compliance Testing
Trimble County Unit 8 - Gas CT - 179 MW	S	12/5/2020 6:00	12/5/2020 18:08	12/5/2020 6:00	12/5/2020 18:08	12:08	12:08	Controls System
In-service June 2004	F			1/26/2021 6:05	1/26/2021 15:04		8:59	Startup System
Jointly owned with LG&E								

nit and Outage Type		Scheduled		Ac	HOURS OF DURATION		REASON FOR DEVIATION FROM SCHEDULED MAINTENANCE	
(F=Forced; S=Scheduled)		FROM	то	FROM	TO	Scheduled	Actual*	OR REASON FOR FORCED OUTAGE AS APPROPRIATE
Trimble County Unit 9 - Gas CT - 179 MW	S	12/6/2020 7:00	12/6/2020 17:14	12/6/2020 7:00	12/6/2020 17:14	10:14	10:14	Controls System
In-service July 2004								
Jointly owned with LG&E								
Trimble County Unit 10 - Gas CT - 179 MW	S	12/6/2020 7:00	12/6/2020 17:14	12/6/2020 7:00	12/6/2020 17:14	10:14	10:14	Controls System
In-service July 2004	F			3/2/2021 7:49	3/2/2021 17:30		9:41	Starting system
Jointly owned with LG&E								

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 16

Responding Witness: Stuart Wilson

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

A-16.

	Capacity Factor (%) (Net MWh)/(period hours x MW rating)										
		<u>`</u>			U/						
	Nov 2020	Dec 2020	Jan 2021	Feb 2021	Mar 2021	Apr 2021					
Brown 3	9.8	17.1	5.5	49.3	34.6	35.3					
Brown 5	1.3	0.2	0.0	1.8	3.1	1.0					
Brown 6	0.1	0.1	0.2	0.0	0.0	0.4					
Brown 7	1.6	0.0	0.2	0.0	2.0	2.0					
Brown 8	0.0	3.2	0.4	0.1	1.5	0.6					
Brown 9	0.9	1.2	0.5	2.3	0.0	1.7					
Brown 10	0.0	0.1	0.6	1.2	2.7	1.8					
Brown 11	0.0	0.1	0.4	0.8	2.6	0.9					
Brown Solar	15.5	9.1	9.4	8.3	21.4	23.4					
Cane Run 7	49.2	96.2	97.5	68.2	95.7	94.7					
Dix 1	4.1	28.6	20.8	86.9	84.1	36.4					
Dix 2	4.2	32.7	51.3	61.1	73.7	9.0					
Dix 3	4.2	32.3	51.1	60.5	90.8	28.8					
Ghent 1	84.9	68.3	82.2	90.2	13.8	0.0					
Ghent 2	64.7	58.5	62.7	74.7	67.5	72.7					
Ghent 3	72.0	61.7	67.8	79.4	70.5	76.1					
Ghent 4	67.5	72.0	60.1	82.1	72.3	4.6					
Haefling 1-2	0.0	0.0	0.0	0.0	0.0	0.0					
Paddy's Run 13	0.6	0.7	0.0	1.2	0.0	0.2					
Trimble County 2	72.0	92.4	74.7	96.0	77.8	8.8					
Trimble County 5	0.0	0.0	0.0	0.0	0.0	2.3					
Trimble County 6	1.6	1.4	1.7	6.3	2.9	8.0					
Trimble County 7	7.2	0.6	0.0	6.0	1.8	7.1					
Trimble County 8	6.4	6.4	1.0	0.7	12.5	11.2					
Trimble County 9	1.1	1.1	0.7	1.9	2.7	3.2					
Trimble County 10	0.0	2.8	3.7	0.3	0.2	1.3					

Notes:

1 –Trimble County 2 is owned by KU (60.75%), LG&E (14.25%), IMPA (12.88%), and IMEA (12.12%).

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

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

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 17

Responding Witness: Michael Drake

- Q-17. For the period under review:
 - a. Explain whether KU made any changes to its maintenance and operation practices or completed any specific generation efficiency improvements that affect fuel usage at KU's generation facilities.
 - b. Describe the impact of these changes on KU's fuel usage.
- A-17. There have been no maintenance or operation practice changes that affect fuel usage during the period under review. The Company strives to maintain unit efficiency through routine cyclic planned outage maintenance. This maintenance work continues to focus on reestablishing expected turbine efficiency through continuous monitoring of all plan systems during operation. The Company contracts Black and Veatch to provide this monitoring on larger units to identify trends which indicate a potential efficiency loss of any system component. Black and Veatch sends notification to the generating stations which track the potential issues through resolution. In evaluating potential major component projects or replacements that may impact efficiency, the Company must balance any potential efficiency benefit associated with the project against both costs and potential implications under the Clean Air Act. The Company has not realized any efficiency improvements through major component projects during this period.

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 18

Responding Witness: Delbert Billiter / Charles Schram

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

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 19

Responding Witness: Andrea Fackler

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

Response to Commission Staff's Initial Request for Information Dated August 18, 2021

Case No. 2021-00294

Question No. 20

Responding Witness: Andrea Fackler

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