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) COMPANY FROM MAY 1, 2021 THROUGH) OCTOBER 31, 2021)

CASE NO. 2022-00038

RESPONSE OF KENTUCKY UTILITIES COMPANY TO THE COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED MARCH 31, 2022

FILED: APRIL 15, 2022

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

The undersigned, Delbert Billiter, being duly sworn, deposes and says that he is Director - Coal Supply and By-Product Marketing 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.

Dellat Killet

Delbert Billiter

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

and State, this 13th day of April 2022.

yschoole

otary Public

Notary Public ID No. 603967

July 11, 2022

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. Drak

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

and State, this <u>1442</u> day of 2022.

Schoole

Notary Public

Notary Public ID. No. 603967

July 11, 2022

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.

a M. Fadler

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

State, this $\frac{34}{3}$ day of 2022.

Schooler

Notary Public

Notary Public ID No. 603967

tuly 11, 2022

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.

hunder M. Achun-

Subscribed and sworn to before me, a Notary Public in and before said County and State this 13th day of April 2022.

yschooler

Notary Public ID No. <u>603967</u>

July 11, 2022

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.

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

State, this <u>13th</u> day of April 2022.

ychooler

Notary Public

Notary Public ID No. 603967

July 11, 2022

Response to Commission Staff's First Request for Information Dated March 31, 2022

Case No. 2022-00038

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, the Company purchased 2,978,492 tons of coal.

Spot:	9%	(278,543 tons)

Contract: 91% (2,699,949 tons)

Response to Commission Staff's First Request for Information Dated March 31, 2022

Case No. 2022-00038

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.

May 1, 202	L through October 31, 2021					
()	(h)	(c)	(4)	()	(f)	(a)
(a)	(b)	Location of	(d)	(e)		(g) Current Price**
Contract/PO	Supplier	Production Facility	Delivery Method	Actual Quantity Received	Tonnage Requirement*	(\$/ton)
J17004B	ACNR Coal Sales, Inc	IL, WV	Barge	479,921	1,020,833	\$43.40-IL, \$42.40-WV
J18009	Alliance Coal LLC	W-KY, WV	Barge	77,126	280,242	\$38.93-KY, \$41.15-WV
J21004	Alliance Coal LLC	W-KY, WV	Barge	842,862	1,291,667	\$39.05-KY, \$41.55-WV
J21010	Alliance Coal LLC	W-KY	Barge	73,463	346,667	\$38.10
J21027	Alliance Coal LLC	W-KY	Barge	268,619	500,000	\$36.00
J21028	Alliance Coal LLC	W-KY, WV	Barge	9,924	75,000	\$53.80-KY, \$57.75-WV
J20001B	Alpha Thermal Coal Sales	ΡΑ	Barge	221,853	239,329	\$40.60
J20002	Arch Coal Sales Company Inc.	WY	Barge	300,728	272,000	\$12.80
J20024	Coal Network LLC	multi-state	Barge	20,752	45,000	\$25.00
J21011	Foresight Coal Sales LLC		Barge	132,929	233,333	\$32.10
J21001	Knight Hawk Coal, LLC	IL	Barge	124,664	250,000	\$37.22
J21022	Knight Hawk Coal, LLC	IL	Barge	59,704	166,667	\$33.48
J19003	Peabody COALSALES LLC	IN	Rail, Barge	123,279	80,667	\$41.10-B, \$38.80-F
J21009	Peabody COALSALES LLC	IN	Rail, Barge, Truck	160,645	209,000	\$34.55
J20006	Western Kentucky Minerals, Inc	W-KY	Barge	82,025	165,000	\$42.65
				2,978,492		
*Tonnage Requir	ement is a ratable volume for combined LC	G&E and KU coal station s	shipments			
**Prices vary by	source/transportation type. Prices as of 1	0/31/21				
					Attachment to	o Response to Question No. 2
						BILLITER
						Page 1 of 2

May 1, 2021	L through October 31, 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)
J17004B	ACNR Coal Sales, Inc	IL, WV	Barge	866,840	1,020,833	\$43.40-IL, \$42.40-WV
J18002C	ACNR Coal Sales, Inc	W-KY	Rail, Barge	39,453	39,453	\$44.98-B, \$44.98-F
J21002	ACNR Coal Sales, Inc	W-KY	Rail, Barge	536,094	500,000	\$42.15
J18009	Alliance Coal LLC	W-KY, WV	Barge	282,959	280,242	\$38.93-KY, \$41.15-WV
J21003	Alliance Coal LLC	W-KY	Rail	520,434	500,000	\$40.95
J21004	Alliance Coal LLC	W-KY, WV	Barge	1,383,587	1,291,667	\$39.05-KY, \$41.55-WV
J21010	Alliance Coal LLC	W-KY	Barge	335,188	346,667	\$38.10
J21027	Alliance Coal LLC	W-KY	Barge	434,117	500,000	\$36.00
J21028	Alliance Coal LLC	W-KY, WV	Barge	18,095	75,000	\$53.80-KY, \$57.75-WV
J20001B	Alpha Thermal Coal Sales	PA	Barge	221,853	239,329	\$40.60
J20002	Arch Coal Sales Company Inc.	WY	Barge	300,728	272,000	\$12.80
J20024	Coal Network LLC	multi-state	Barge	39,705	45,000	\$25.00
J21011	Foresight Coal Sales LLC	IL	Barge	192,651	233,333	\$32.10
J21001	Knight Hawk Coal, LLC	IL	Barge	255,556	250,000	\$37.22
J21022	Knight Hawk Coal, LLC	IL	Barge	198,521	166,667	\$33.48
J19003	Peabody COALSALES LLC	IN	Rail, Barge	123,279	80,667	\$41.10-B, \$38.80-F
J21009	Peabody COALSALES LLC	IN	Rail, Barge, Truck	160,645	209,000	\$34.55
J20006	Western Kentucky Minerals, Inc	W-KY	Barge	169,026	165,000	\$42.65
				6,078,730	6,214,858	
*Tonnage Requii	ement is a ratable volume for combined L	G&E and KU coal station s	hipments			
**Prices vary by	source/transportation type. Prices as of 1	0/31/21			Attachment to	o Response to Question No. 2
						BILLITER
						Page 2 of 2

Response to Commission Staff's First Request for Information Dated March 31, 2022

Case No. 2022-00038

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 October 31, 2021:

EW Brown	99,348 Tons; 25 Days	Target 33-63 Days
Ghent	553,672 Tons; 26 Days	Target 20-40 Days
Trimble County ¹	194,870 Tons; 30 Days	Target 21-43 Days
Total	847,890 Tons; 27 Days	Target 23-45 Days

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

¹ 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.

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 First Request for Information Dated March 31, 2022

Case No. 2022-00038

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 - LGE KU 21-02

Date:	August 6, 2021
Contract/Spot:	Spot
Quantities:	No minimum or maximum specified
Quality:	Suitable for KU's E.W. Brown Station and Ghent Station,
	LG&E's Mill Creek Station, and KU's and LG&E's
	Trimble County Station
Period:	October 1, 2021 through June 30, 2022 – Spot
Generating Units:	All units at E.W. Brown, Ghent, Trimble County and Mill
_	Creek Stations

b. Number of vendors sent a solicitation: 75
 Number of vendors responded: 3 companies / 5 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 – J21028 / only 4th Qtr. 2021 offer Peabody COALSALES, LLC – J22003 / lowest 1st and 2nd Qtr. 2022 offer

Did not purchase Foresight because of shut down of their Sugar Camp Mine Complex due to fire.

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

a. SOLICITATION 2 - LGE KU 21-03

Date:	September 21, 2021
Contract/Spot:	Spot and Term
Quantities:	No minimum or maximum specified
Quality:	Suitable for KU's E.W. Brown Station and Ghent Station,
	LG&E's Mill Creek Station, and KU's and LG&E's
	Trimble County Station
Period:	October 1, 2021 through June 30, 2022 – Spot
	Term coal beginning in 2022
Generating Units:	All units at E.W. Brown, Ghent, Trimble County and Mill
-	Creek Stations

b. Number of vendors sent a solicitation: 76

Number of vendors responded: 6 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 – J22004 / only spot 2022 coal available

High Sulfur Coal - Term

Alliance Coal, LLC – J23004 / lowest 2023-2026 offer

Iron Senergy Coal Sales, Inc. – J20001 Amendment No. 1 / 2nd lowest 2023-2024 offer

Knight Hawk Coal, LLC – J23002 / 4th lowest 2023 offer; tied for 2nd lowest 2024 offer; 2nd lowest 2025-2026 offer; lowest 2027 offer

Peabody COALSALES, LLC - J23003 / 3rd lowest 2023-2024 offer

Did not purchase Coal Network offer; offer was subject to prior sale and was not available when LG&E-KU contacted Coal Network to purchase.

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

The entire attachment is Confidential and provided separately under seal.

Response to Commission Staff's First Request for Information Dated March 31, 2022

Case No. 2022-00038

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 First Request for Information Dated March 31, 2022

Case No. 2022-00038

Question No. 6

Responding Witness: Charles R. 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.

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

Vendor	Type ¹	MMBTU
BP Energy Company	Spot	286,819
Castleton Commodities Merchant Trading L.P.	Spot	42,200
CIMA Energy, LP	Spot	100,153
Colonial Energy, Inc.	Spot	15,500
Direct Energy Business Marketing, LLC	Spot	9,300
DTE Energy Trading, Inc.	Spot	111,015
Eco-Energy Natural Gas, LLC	Spot	294,764
Engie Energy Marketing NA, Inc.	Spot	30,400
Exelon Generation Company, LLC	Spot	14,200
Hartree Partners, LP	Spot	27,100
Koch Energy Services, LLC	Spot	74,573
Macquarie Energy, LLC	Spot	5,000
NextEra Energy Marketing, LLC	Spot	186,000
Range Resources - Appalachia, LLC	Spot	10,000
Sequent Energy Management, L.P.	Spot	77,200
Shell Energy North America (US), L.P.	Spot	315,800
Southwest Energy, L.P.	Spot	2,987,896
Spire Marketing Inc.	Spot	74,900
Spotlight Energy, LLC	Spot	5,500
Symmetry Energy Solutions, LLC	Spot	27,500
Tenaska Marketing Ventures	Spot	7,154,700
Tennessee Gas Pipeline Company, L.L.C.	Spot	707
Tennessee Valley Authority	Spot	8,700
Twin Eagle Resource Management, LLC	Spot	130,900
Uniper Global Commodities North America LLC	Spot	40,000
United Energy Trading, LLC	Spot	721,125
Vitol Inc.	Spot	54,600
Wells Fargo Commodities, LLC	Spot	10,500
XTO Energy Inc.	Spot	117,255
Columbia Gas of Kentucky, Inc.	GSO Customer ²	1,123
LG&E Gas Supply	Special Contract ³	125,935
EDF Trading North America, LLC	Forward	3,687,197
Exelon Generation Company, LLC	Forward	1,840,000
NextEra Energy Marketing, LLC	Forward	1,227,955
Spire Marketing Inc.	Forward	2,140,000
		2
Grand Total		21,956,517
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¹ Spot refers to gas purchases delivered during the next gas day following the transaction. Friday transactions include Sat, Sun, & Mon (holiday weekends can cover four days). Forward refers to gas purchased for delivery periods typically starting after the current month.

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

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

Response to Commission Staff's First Request for Information Dated March 31, 2022

Case No. 2022-00038

Question No. 7

Responding Witness: Charles R. 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 First Request for Information Dated March 31, 2022

Case No. 2022-00038

Question No. 8

Responding Witness: Delbert Billiter / Charles R. 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 First Request for Information Dated March 31, 2022

Case No. 2022-00038

Question No. 9

Responding Witness: Delbert Billiter / Charles R. 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 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, Company employees may visit a vendor as needed to address problems and issues at any time.

Response to Commission Staff's First Request for Information Dated March 31, 2022

Case No. 2022-00038

Question No. 10

Responding Witness: Delbert Billiter / Charles R. Schram

Q-10.

- a. State whether KU is currently involved in any litigation with its current or former fuel suppliers or transportation vendors. If so, 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.
- a. 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.
 - (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 Companies have no liability associated with this contract.
 - (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. Coal Supply Agreement J19002 was rejected by the Debtors in November 2021.

Response to Commission Staff's First Request for Information Dated March 31, 2022

Case No. 2022-00038

Question No. 11

Responding Witness: Delbert Billiter / Charles R. 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. Yes.
 - (1) During the period under review, there were no changes to the Power Supply Commodity Policy Natural Gas Fuel for Generation.

The Coal Supply and By-Products Marketing Procedures were updated to reflect changes to the department name, department position changes and other miscellaneous updates. See attached redline version of the document that shows all changes compared to the Corporate Fuels and By-Products Procurement Procedures updated April 1, 2017 and provided to the Commission in Case No. 2017-00284 in response to Question No. 1-15.

- (2) See attached.
- (3) January 17, 2022

- (4) The Coal Supply and By-Products Marketing Procedures were updated to reflect changes to the department name, department position changes and other miscellaneous updates.
- b. 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.

A. <u>Definitions:</u>

- 1. "Agreement" means a legally binding document, in which one party agrees to sell and the other agrees to buy Fuel, fully executed by both Buyer and Seller.
- "Authority Limit Matrix" The Authority Limit Matrix (ALM) is a Company policy to be used in combination with these more detailed procedures, indicating the minimum authority required for specific procurement transactions. Its purpose is to provide an easily accessible source of information with respect to the approval process of the Company (as defined below).
- 3. "Award Recommendation" means the Company's internal management review and approval process of a recommended Fuel purchase.
- 4. "Bulk Commodities/Services" means Bulk Commodities (including, but not limited to limestone, ammonia, hydrated lime, and activated carbon) to be used by the Stations and Services (including, but not limited to laboratory services, weighing and sampling services, stockpile surveys, governmental imposition claims assessment and coal pricing information services).
- 5. "Chief Operating Officer" means the Company's principal officer responsible for business operations.
- "Company" LG&E and KU Energy LLC (LKE), including, its operating and service subsidiaries Louisville Gas and Electric Company (LG&E), Kentucky Utilities Company (KU) or LG&E and KU Services Company.
- 7. "Contract" is an Agreement for Fuel with a term typically one year or greater.
- 8. "Director" means the Company's Director of Coal Supply and By-Products Marketing.
- 9. "Department" means the Company's Coal Supply and By-Products Marketing Department.
- 10. "Distressed Coal" means a limited amount of coal which may be purchased at a price below the current market price of similar quality coal.
- 11. "Emergency" means extraordinary conditions affecting Fuel production, transportation, or usage; including, but not limited to strikes, lockouts or other labor problems, embargoes, mining impediments, floods, river closures, extreme market conditions and other problems affecting the production or transportation of Fuel, existing and/or forecasted extreme weather conditions, or any other conditions or circumstances that can be reasonably foreseen as impairing the continued supply of Fuel to the Company.
- 12. "Environmental Standards" mean the legal requirements for compliance with emission levels or other environmental protection requirements applicable to one or more of the Units.
- 13. "Formal Solicitation" means the process of soliciting sealed bids for the supply of Fuel.

- 14. "Fuel" means coal, fuel oil, Transportation Services and Bulk Commodities/Services (the latter two as contemplated by Sections J and K) purchased in each case by the Coal Supply and By-Products Marketing Department for use by the Company at one of its Stations.
- 15. "Informal Bid" means the process of considering unsolicited or solicited oral or written bids for Fuel purchases.
- 16. "Joint Agreement" is any agreement that is written to supply Fuel to both LG&E and KU owned Units as contemplated in Section D.8. below.
- 17. "Long-Term Purchase" means any purchase of Fuel by the Company where the terms and conditions are incorporated into a Contract with a term of one year or greater.
- 18. "Purchase Order" is an Agreement for the supply of Fuel with a term typically less than one year.
- 19. "Sarbanes-Oxley" means the Sarbanes-Oxley Act of 2002 (also known as the Public Company Accounting Reform and Investor Protection Act).
- 20. "Spot Purchase" means any purchase of Fuel by the Company where the terms and conditions are incorporated into a Purchase Order or Contract with a term typically of less than one year.
- 21. "Station" means one of the Company's generating stations.
- 22. "Supplier" means the seller who is a party to an Agreement and is obligated to comply with the Agreement's terms.
- 23. "Transportation Services" means the mode(s) of moving Fuel from the point of purchase to the receiving Station, including all related costs and activities (owned/leased equipment, maintenance and repair, barge fleeting and cleaning services, blending, transloading, etc.).
- 24. "Unit" means a generating unit at a Station.
- 25. "Vice President Energy Supply and Analysis" means the Company's principal officer to whom the Director of Coal Supply and By-Products Marketing reports and who in turn reports to the Chief Operating Officer.

B. <u>Fuel Procurement Procedures:</u>

The Company's Coal Supply and By-Products Marketing Procurement Procedures define the process to obtain an adequate and reliable supply of Fuel of sufficient quality that yields the lowest possible cost of electrical energy delivered to the Unit bus bar, consistent with the Company's obligation to provide adequate and reliable service to its customers, to meet operational and Environmental Standards, and to meet any other applicable legal requirements. The Company will use its best efforts to secure its Fuel

supply at competitive prices through the use of the Formal Solicitation, Informal Bid, and negotiation process as described in this document. The awarding of Contracts and Purchase Orders will comply with internal business controls including the Authority Limit Matrix, Sarbanes Oxley compliance and Internal Audit Services' recommendations. The Company has detailed internal control procedures covering Contract Management, Receipt of Goods and Payments (including weighing, sampling, and invoice payment), and Coal Inventory (includes Stockpile Surveys).

Implementation and oversight of the fuel procurement process is of highest priority to the Company. The Director of Coal Supply and By-Products Marketing will review the Company's Coal Supply and By-Products Marketing Procurement Procedures annually and update them as appropriate. The Department shall be organized and staffed, and procurement procedures and administration shall be conducted, in an efficient and practical manner consistent with the Company's policies. Fuel shall be purchased at competitive prices considering all material factors, including, but not limited to, quantity needed to maintain an adequate inventory, quality required to meet Unit operating characteristics and Environmental Standards, resulting bus bar energy costs, reliability of the Supplier, diversity of Suppliers, supply regions, and transportation modes, and meeting Emergency or other unusual circumstances affecting market conditions.

C. Organization:

- 1. <u>Department Structure.</u> The Department shall be organized and staffed to effectively administer the Company's Fuel procurement function.
- 2. <u>Organizational Responsibility.</u> The Director is responsible for the operations of the Department and reports to the Vice President Energy Supply and Analysis who is responsible for the Power Supply and Fuel Procurement functions. The Vice President Energy Supply and Analysis reports to the Chief Operating Officer who has the final responsibility for Fuel procurement. Other departments may be utilized by the Department to the extent the Director, Vice President Energy Supply and Analysis, and/or Chief Operating Officer consider advisable in the execution of the functions of the Department.
- 3. <u>Approval Authority (Award Recommendation).</u> An Award Recommendation will be prepared for all Agreements for the purchase of Fuel. The Award Recommendation will be signed (at a minimum) by the Department's Coal Services Administrator, Manager Coal Supply Services, Director, General Manager(s) of the Station(s) that is (are) to receive the Fuel, and the Vice President Power Production. Additional signatures or approvals may be required in accordance with the following Authority Limit Matrix:

Position	Maximum Term	Maximum Tenor	Maximum Notional \$ Amount
Manager Coal Supply Services	1 year	2 years	\$10,000,000
Director, Coal Supply and By- Products Marketing –	1 year	2 years	\$10,000,000
Vice President, Energy Supply and Analysis	3 years	4 years	\$20,000,000
Chief Operating Officer	5 years	6 years	\$25,000,000
Chief Financial Officer			\$180,000,000
President			\$180,000,000
LG&E and KU Energy LLC Investment Committee; LG&E and KU Energy LLC Board			Over \$180,000,000

- 4. <u>Reports.</u> The Director will instruct the Department to prepare, maintain and distribute various reports to management and others as deemed necessary for business operations and regulatory requirements.
- 5. <u>Records.</u> The Department shall maintain the following records:
 - a. <u>Open Files.</u> The Department shall maintain within the Department's office area, the following files for at least one year or longer as the Agreement term or other conditions warrant:
 - (1) For each current Fuel Supplier, the files will contain:
 - (a) Contract documents, amendments, Purchase Orders, and escalation documentation;
 - (b) General correspondence;
 - (c) Invoices and invoice verification data;
 - (d) Delivery records and quality analyses data;
 - (e) Field inspection reports and other data.
 - (2) A record of transportation units (railroad cars, barges, etc.) owned or leased by the Company.
 - (3) A list containing current Suppliers and known potential Suppliers of Fuel.
 - b. <u>Closed Files.</u> The Department shall maintain its closed files in accordance with the Company's record management and retention policy.
- 6. <u>General Administrative Duties.</u>

The Department shall subscribe to trade and industry publications and reports of governmental agencies concerning Fuel, Transportation Services, Bulk Commodities/Services, market information and prices. The Department shall use its best efforts to keep current on Fuel market conditions, prices and availability, and other developments relating to Fuel procurement.

D. <u>Fuel Supply Procedures:</u>

- 1. <u>Projections.</u> In conjunction with other departments of the Company, the Department shall prepare an annual projection of Fuel usage and delivered cost for each Station for the number of years required in the Company's planning process.
- 2. <u>Long-Term/Spot Mix.</u> Subject to the approvals as set forth herein, the Department shall recommend whether a Long-Term or Spot Purchase is advisable, considering the following factors: (a) the availability of adequate Fuel from qualified Suppliers, (b) the need to have an adequate inventory committed for an existing Unit, changes to an existing Unit, or a planned new Unit, (c) consistent with fuel procurement strategies, (d) the desire to maintain flexibility to market conditions and other factors affecting price and availability, (e) existing and anticipated Environmental Standards, and (f) such other factors as may reasonably affect the implementation of the Company's Coal Supply and By-Products Marketing Procurement Procedures.
- 3. <u>Current Requirements.</u> The Department shall continually review and analyze the data available to the Department in order to purchase Fuel in a timely manner to meet the requirements of the Company.
- 4. <u>Supplier Qualifications.</u> The Company shall select potential suppliers based on the current supplier list, performance on past and current Fuel Agreements, financial information, market intelligence from industry research, and general knowledge of the industry. No potential qualified supplier shall be preferred or discriminated against because of race, religion, color, sex, age or marital status of the supplier or any of its representatives.

The supplier list is periodically reviewed by the Department to eliminate any suppliers that are known to have gone out of business and to also add any new or existing suppliers that were previously not on the supplier list. The Department reviews the membership lists of several coal associations (for example the Kentucky Coal Association, the Lexington Coal Exchange, the Coal Institute, the American Coal Council, the National Mining Association, etc.) for new suppliers to add to the supplier list and also adds new suppliers based upon field inspection visits. If a supplier is identified that is not on the current supplier list, the Department will add the supplier to the list for the next RFQ. Suppliers can be added to the supplier list either by request of the supplier or by the Department.

A notice of a Request for Quotation (RFQ) is published in several Coal Industry Newsletters. The RFQ is initially sent to the suppliers on the current supplier list and posted on the Company website. If a supplier that has not received the RFQ calls and asks to be put on the Department's supplier list, they are automatically added to that list

and a copy of the RFQ is sent to that supplier. During the evaluation of the bids, if a new supplier has submitted a bid that is competitive, a new supplier evaluation will be performed to determine the capability of the supplier.

The supplier evaluation is done to determine if a supplier has the ability to deliver the quantity and quality of coal bid at the offered price. An actual site visit may be conducted. The information requested is based upon:

- The volume and term offered by the supplier in response to the RFQ
- Past experience the Company has with the supplier
- The size and financial stability of the supplier
- Past experience the Company has with the type of coal being offered

- Previous knowledge the Company has concerning the source operation (possibly under a different source name)

The data requested may include coal reserve data such as property maps and drill logs, mining plans, listing of all production equipment, coal preparation facilities such as coal preparation plants, weighing, sampling and analysis capabilities on site, mine staffing and organization, past production records, and status of permits. In addition, financial data will be requested, and a supplier credit assessment will be performed in accordance with company policy. If all operational information, financial data, and other results from the site visit evaluation are acceptable, the supplier is approved.

5. Solicitations.

a. <u>Formal Solicitations</u>. The Company shall purchase its Fuel through sealed-bid solicitations. However, the Company reserves the right to request or accept Informal Bids for Fuel purchases as described in Section 5.b., when in its judgment, market conditions or Unit conditions provide an opportunity to obtain Fuel more advantageously or more quickly than through the formal sealed-bid procedures. When the Company foregoes the Formal Solicitation process in favor of the Informal Bid procedure (Section 5.b. below), documentation shall be included in the resulting Contract or Purchase Order file describing the conditions.

A Request for Quotation ("RFQ") number will be assigned to each quotation package. The quotation must be returned to the company address as indicated on or before the due date and time, noting on the mailing label the RFQ number. The RFQ number will identify the quotation and ensure the quotation is opened according to the Coal Supply and By-Products Marketing Procurement Procedures.

The RFQ package shall contain the following minimum requirements:

- Instructions to Suppliers on the submission of an RFQ, including time and date the bids are due, correct labeling of bid envelope, signatures required, etc.
- Scope of supply Agreement
- Listing of typical information required from Supplier

Quantity and quality of coal being offered

Bid Price

Length of purchase

Transportation capabilities

Mining capabilities

Severance Tax data

Company terms and conditions

RFQ's shall be opened on or after the established due date and time within the presence of one or more witnesses from another department. A numbered log shall be kept for logging in the receipt of each sealed envelope. This numbered log shall be signed by the witnesses noting the bids were all sealed prior to opening and were received prior to the due date and time. Those bids received after the designated time will be returned unopened to the bidder, unless the Director waives this provision.

Upon opening the sealed envelopes, each bid shall be given the log number assigned to it and initialed by the witnesses attending the bid opening.

All candidates shall be given the same opportunity and time frame to respond to the RFQ. Information clarifications shall be shared with all candidates. A copy of the RFQ and the original of the suppliers' bid documents with evidence of the witness signatures shall be maintained within the Department.

The Department's Coal Services Administrator is responsible for entering the bid data into the bid evaluation spreadsheet. The spreadsheet contains data fields such as:

Supplier's name (from bid)

Mine name and location (from bid)

Fuel loading point, river milepost or rail loadout (from bid)

Annual price in dollars per ton and cents/MMBtu (from bid)

Transportation cost (assigned by the Coal Services Administrator)

Severance Tax paid on the coal offered (from bid)

Calculated total delivered cost (calculated by the Coal Services Administrator)

Calculated evaluated cost (calculated total delivered cost less any severance tax paid on the coal)

Fuel technical specifications (from bid), such as:

BTU per pound

Sulfur content

Moisture content

Ash content

Chlorine content

Size

Arsenic content

Hardgrove Index

Other technical specifications as appropriate

The bids are secured in the Department area.

The Department's Manager Coal Supply Services will independently verify that all bid data is correctly entered into the bid evaluation spreadsheet.

b. <u>Informal Bids</u>. When, in the Company's judgment, Fuel can be obtained more advantageously or quickly for a particular Station through the Informal Bid procedures, the Department may solicit offers or accept unsolicited offers from Suppliers by telephone, electronic mail, facsimile or otherwise. Although these bids are typically used for Spot Purchases, circumstances may arise that would justify the recommendation of a Long-Term Purchase from an Informal Bid process. The Award Recommendation for all such Informal Bid purchases shall include the Department's Fuel Sole Source Award Recommendation form with appropriate signatures.

6. Long-Term Purchases. The Department shall review and analyze each Fuel offer. The evaluation will include, but not necessarily be limited to, the items required by the Company to satisfy operational, Environmental Standards and economic criteria. Based upon the bid evaluation spreadsheet, the Department will evaluate and rank all quotations received by total delivered cost and lowest evaluated cost. Other factors may be considered, including but not limited to, ranking reports generated by a software model that evaluates the impact of different coal qualities on Unit bus bar costs, supplier credit assessment, supplier past performance, diversity of region of supply, diversity of transportation mode, and diversity of suppliers. From this ranking, a short list of bidders may be selected from which the Department intends to conduct further discussions and/or negotiations. The short list may include unsolicited offers. The size of the short list will be determined solely at the Department's discretion. The Department may engage in preliminary negotiations with Suppliers on the short list to determine which offers warrant further consideration. The objective of the negotiations shall be to reach Agreements with Suppliers that provide the Company with favorable terms and conditions, the lowest possible cost of electrical energy delivered to the Unit bus bar and reliable supply consistent with other qualifiers related to supplier reliability, existing and future Environmental Standards, transportation options, etc. A team may be formed to conduct negotiations with bidders on the short list. Generally, this team will consist of two or more representatives from the Department. The terms and conditions outlined in the quotation submitted to the Department by the bidder shall be the basis for beginning negotiations with each potential Supplier. A representative from the Legal Department shall review documents regarding terms and conditions.

The Department may in some instances perform investigations of the bidders to determine their ability to supply Fuel under the terms and conditions outlined in their proposals. These investigations may include site visits, mine operation audits, audits of financial information, test shipments, or other similar actions intended to determine the bidder's qualification as a Supplier. The Department shall verify the adequacy of the proposed source of supply for coal quantity and quality.

The recommended Supplier(s) shall be selected by the negotiating team based upon the evaluation criteria and the results of the negotiations. The Department's Coal Services Administrator will prepare the Award Recommendation for approval as detailed in Section C.3. This recommendation will document the selection criteria and pertinent factors, and in circumstances where more than one company is selected, the recommendation shall describe the tonnage requirements and other responsibilities of each of the other recommended Suppliers.

- 7. <u>Spot Purchases.</u> Spot purchases, and resulting Purchase Orders or Contracts, may be made by the Company subject to the limit of authority stated in section C.3. In instances where there exists an opportunity to purchase Distressed Coal or other coal from an Informal Bid, the Manager Coal Supply Services may recommend the purchase of such coal to the Director without soliciting proposals through the Formal Solicitation process. The Award Recommendation for all such Fuel purchases shall include the Department's Fuel Sole Source Award Recommendation form with appropriate signatures.
- <u>Joint Agreements.</u> Joint Agreements shall be made at the discretion of the Department in order to capture economic benefit from the combined purchasing power of LG&E and KU. Such discretion will be based upon the Company's operating requirements,

Environmental Standards, inventory levels, and the ability of the Stations to burn similar fuels.

9. <u>Documentation</u>. Contracts and Purchase Orders shall be signed by the Supplier and the Company.

The following documents must be maintained:

- The final list of bidders
- A copy of the bid package
- The bidders' responses with witnesses' signatures
- The bid evaluation summary

E. <u>Agreement Administration:</u>

- 1. <u>Compliance.</u> The Department shall review and analyze daily business and operational reports to properly administer all Agreements. Coal weighing and sampling is conducted at each individual Station. Coal weights are measured in accordance with industry-accepted methods. Coal sampling and analysis is performed in accordance with Generation Services' System Laboratory procedures. These procedures have been developed in accordance with ASTM standards and cover coal sampling, coal sample preparation, coal sample identification, handling and shipping, and coal analysis on a parameter-by-parameter basis. Coal quantity and quality are reported to the Department through the Fuels Management System.
- 2. <u>Amendments.</u> A Contract/Purchase Order shall not be materially amended except after analysis by the Department, recommendation of the Director, review by the Legal Department and in accordance with the Authority Limit Matrix in C.3.
- 3. <u>Agreement Administration.</u> The Department shall maintain the necessary data to administer the Agreements. Every Supplier's request for a change outside the existing terms, conditions, or prices must be written and supported by adequate data in conformity with the Agreement. Each request shall be analyzed by the Department against the Agreement provisions and reported with recommendations to the Director.
- 4. <u>Supplier's Relief.</u> Any Supplier's request or claim for relief from compliance with any provision of the Agreement's terms such as Force Majeure conditions, quality specifications, approval of alternate sources, etc., must be in writing with an adequate description of conditions warranting nonperformance. Each request or claim shall be reviewed by the Director and the Company's Legal Department.
- 5. <u>Inspections.</u> The Director shall cause inspections of mining and other facilities of a Supplier as part of Agreement Administration.

F. <u>Agreement Enforcement:</u>

- 1. <u>General Enforcement Policy.</u> Supplier obligations under Agreements shall be enforced by the Company to ensure Supplier compliance with the Company's overall procurement policy and to provide for the continuing supply of Fuel.
- 2. <u>Department Responsibility.</u> Whenever it is determined that a shipment does not meet the Agreement terms or a Fuel Supplier is not complying with the Agreement terms, the Department shall inform the Supplier and direct that subsequent shipments be in compliance.

G. Legal Assistance:

The Department shall have access to, and may receive legal advice from, the Legal Department on all matters relating to Fuel procurement, including Contract, Purchase Order and Agreement documentation, administration and enforcement.

H. Fuel Inventory Levels:

The Company has an obligation to ensure the availability of continuous reliable service to its customers. Decisions affecting Fuel inventory shall be responsive to this obligation.

The Company strives to maintain an adequate inventory to ensure service reliability while allowing for enough flexibility so inventory levels can be responsive to known and anticipated changes in conditions and minimize the risks of unforeseen conditions. Inventory ranges are established based upon forecasted Unit utilization, deliverability risks related to availability of truck, rail and barge capacity and associated transportation infrastructure, fuel quality requirements of the Units, the position of the Unit in the dispatch order, risk of market supply-demand imbalance, and the ability to conduct timely transactions. The general level of inventory is adjusted to meet anticipated conditions (i.e. summer/winter peak load, river lock outages, Unit outages, unloading system outages, etc.).

Coal inventories are monitored on a daily basis and reported monthly in the Department's Monthly Fuels Management Report which is widely distributed within the Company (including members of senior management). An annual physical inventory survey is taken and the results of the physical inventory survey are booked by the end of the year in the Fuels Management System.

I. <u>Emergency Procurement:</u>

Any one or more of the procedures described herein may be waived by the Vice President - Energy Supply and Analysis, whenever, Fuel must be purchased due to

extraordinary conditions such as strikes, lockouts or other labor problems affecting Fuel production or transportation, embargoes, mining or other problems affecting production or transportation, existing and/or forecast extreme weather conditions, or any other conditions or circumstances that can be reasonably foreseen as impairing the continued supply of Fuel to the Company. When such a purchase is made, documentation of circumstances will be included in the Contract or Purchase Order file.

J. <u>Transportation Services:</u>

Transportation Services bids shall be requested, and Agreements negotiated whenever appropriate. A tariff may be used in lieu of an Agreement if conditions warrant. Consideration shall generally be given to the following factors when considering the need or desirability to make a Transportation Services Agreement:

- Station requirements;
- the locations of potential Fuel Suppliers;
- the most desirable transportation modes available;
- coal unloading and handling system constraints;
- existing transportation routes and transfer points between Suppliers and Stations;
- desirability of maintaining flexibility with different modes of transportation;
- economics;
- other factors which may affect the delivery of Fuel to the Stations.

The process of selecting and contracting for Transportation Services will vary with the mode of transportation being sought. For barge and truck deliveries, the Department will generally use the Company's accepted competitive bidding procedures. In instances where only one rail carrier serves a Station, direct negotiations with the rail carrier serving a particular coal source may be initiated.

The selections of a transportation Supplier will generally be based upon, but not necessarily limited to, cost, reliability, coal unloading and handling system constraints, and other factors. Transportation Service Agreements must be in writing and signed by all parties, unless provided under an approved tariff. The approval procedures set forth in Section C.3 shall be used for the approval of all Transportation Agreements.

K. <u>Bulk Commodities/Services/Other Fuels:</u>

Bulk Commodities/Services shall be requested, and Agreements negotiated by the Department, whenever appropriate. Associated transportation services related to Section J. such as railcar leases, railcar maintenance and repair, barge maintenance and repair, barge fleeting services, coal blending, and coal transloading services shall also be requested and Agreements negotiated by the Department, whenever appropriate. All of these Bulk Commodities/Services Agreements will abide by the Approval Authority Limits as set forth in Section C.3. above.

<u>Natural Gas.</u> The Power Supply Department is responsible for the purchase of natural gas and associated pipeline transportation for the Stations.

<u>Fuel Oil.</u> Fuel oil is procured on an "as-needed" basis due to the infrequency of use and the nature of the oil market. When the need for fuel oil arises, the Department will solicit suppliers for offers. Purchases are made on the basis of lowest delivered cost and the ability to fill the order..

All documentation will be maintained pursuant to Section D.9 above.

L. <u>Affiliate Transactions:</u>

Transactions and relationships between the Company and its unregulated affiliates are governed by three governmental agencies: the Kentucky Public Service Commission, the Federal Energy Regulatory Commission, and as regards Kentucky Utilities Company, the Virginia State Corporation Commission.

The Company may purchase Fuel from an affiliate only at a price permissible under applicable affiliated restriction rules of the above regulators, if such a transfer is reasonably required by the Company to meet an Emergency and the Company believes in good faith that, under the circumstances, the transaction will be to the advantage of the Company. At the time of the affiliate transaction, the Company will document through the award recommendation process, the pricing basis and the justification for the affiliate transaction. The Company shall report any such purchase in its next recurrent report due to the Commission (Form A or Form B filing, or their successor(s)). All such affiliate transactions must as a minimum, meet the requirements of the Affiliate Transaction Overview, dated May 26, 2003, including the requirements of Kentucky Revised Statutes Chapter 278, Kentucky Public Service Commission Sections 2201 through 2219; the Federal Energy Regulatory Commission, 18 CFR 35.44; and Virginia State Corporation Commission, Code of Virginia Title 56 – Chapter 4 and any other applicable affiliate transaction rules.

M. <u>Ethics and Conduct:</u>

The Company recognizes the importance of following the Company's Standards of Integrity to guide the conduct of the Department in the performance of its duties and responsibilities:

The Department shall endeavor to serve the best interests of the Company and its customers in the performance of the Department's duties and responsibilities.

Department staff shall adhere to the ethical standards and policies of the Company.

Each employee involved with the procurement of Fuel will be required to promptly disclose, in writing, any actual or potential conflicts of interest to their supervisor and the LG&E/KU Compliance Department.

N. <u>Penalties For Noncompliance:</u>

All Department employees are required to familiarize themselves with the Coal Supply and By-Products Marketing Procurement Procedures and acknowledge through a process established by management, that they have received, read, understand, accept, and will act in accordance with this document. Failure to comply with any term of the procedures may result in disciplinary action, up to and including discharge.

Key Contact: Manager - Fuels Accounting and Administration

References: Authority Limit Matrix, Records Management and Retention Policy, Standards of Integrity, Reliability Standards, and Affiliate Restriction Regulations

Administrative Responsibility: Director, Coal Supply and By-Products Marketing

Originally issued at Louisville, Kentucky, the 10th day of February, 2003.

Revised effective January 17, 2022.

Louisville Gas and Electric Company

Kentucky Utilities Company

By

Lohnie Bellar Chief Operating Officer

By

David Sinclair Vice President – Energy Supply and Analysis

Response to Commission Staff's First Request for Information Dated March 31, 2022

Case No. 2022-00038

Question No. 12

Responding Witness: Stuart A. 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.

		Companies'	KU Portion	
Utility	Period	Amt (MW)	(MW)	Purpose
OVEC	May 2021	~ 109	~ 33	Baseload
OVEC	Jun 2021	~ 135	~ 41	Baseload
OVEC	Jul 2021	~ 138	~ 42	Baseload
OVEC	Aug 2021	~ 138	~ 42	Baseload
OVEC	Sep 2021	~ 110	~ 34	Baseload
OVEC	Oct 2021	~ 99	~ 30	Baseload

(b) Firm Sales

None.

Response to Commission Staff's First Request for Information Dated March 31, 2022

Case No. 2022-00038

Question No. 13

Responding Witness: Andrea M. 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				Fuel		Other		Total
Company		Transaction	KWH	Demand(\$)	′	Charges(\$)		Charges(\$)		Charges(\$)
Sales										ſ
EVERGY KANSAS CENTRAL, INC.	EVGY	Economy	71,000		\$	1,517.11	\$	1,039.45	\$	2,556.56
ENERGY IMBALANCE	IMBL	Economy	446,000		\$	7,077.61	\$	4,741.41	\$	11,819.02
MACQUARIECOOK	MACQUARIE	Economy	1,839,000		\$	39,542.14	\$	27,092.52	\$	66,634.66
MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.	MISO	Economy	4,607,000		\$	101,656.63	\$	69,650.61	\$	171,307.24
PJM INTERCONNECTION ASSOCIATION	PJM	Economy	4,144,000		\$	91,032.17	\$	62,371.22	\$	153,403.39
RAINBOW ENERGY MARKETING CORP	REMC	Economy	142,000		\$	2,738.33	\$	1,876.18	\$	4,614.51
THE ENERGY AUTHORITY	TEA	Economy	1,000		\$	14.37	\$	18.46	\$	32.83
TENNESSEE VALLEY AUTHORITY	TVA	Economy	499,000		\$	11,228.40	\$	7,693.20	\$	18,921.60
LOUISVILLE GAS & ELECTRIC	LGE	Economy	20,288,000		\$	418,153.59	\$	4,691.62	\$	422,845.21
Total Sales			32,037,000	\$ -	\$	672,960.35	\$	179,174.67	\$	852,135.02
4										



				Billing Components						
		Type of				Fuel		Other		Total
Company		Transaction	KWH	Demand(\$)		Charges(\$)		Charges(\$)		Charges(\$)
Sales										
EVERGY KANSAS CENTRAL, INC.	EVGY	Economy	404,000		\$	9,172.40	\$	9,236.71	\$	18,409.11
EXELON GENERATION COMPANY, LLC	EXEL	Economy	430,000		\$	7,810.47	\$	7,865.23	\$	15,675.70
INDIANA MUNICIPAL POWER AGENCY	IMPA	Economy	27,000		\$	426.33	\$	429.33	\$	855.66
ENERGY IMBALANCE	IMBL	Economy	1,929,000		\$	27,355.92	\$	27,413.72	\$	54,769.64
MACQUARIECOOK	MACQUARIE	Economy	3,089,000		\$	66,216.54	\$	66,680.69	\$	132,897.23
MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.	MISO	Economy	30,572,000		\$	734,338.81	\$	739,486.24	\$	1,473,825.05
PJM INTERCONNECTION ASSOCIATION	PJM	Economy	5,825,000		\$	118,155.31	\$	118,983.49	\$	237,138.80
RAINBOW ENERGY MARKETING CORP	REMC	Economy	356,000		\$	6,776.61	\$	6,824.11	\$	13,600.72
THE ENERGY AUTHORITY	TEA	Economy	55,000		\$	1,052.43	\$	1,059.81	\$	2,112.24
TENNESSEE VALLEY AUTHORITY	TVA	Economy	3,018,000		\$	74,699.70	\$	75,223.31	\$	149,923.01
LOUISVILLE GAS & ELECTRIC	LGE	Economy	113,652,000		\$	2,308,669.89	\$	51.97	\$	2,308,721.86
Total Sales			159,357,000	\$ -	\$	3,354,674.41	\$	1,053,254.61	\$	4,407,929.02
4										,



				Billing Components						
		Type of				Fuel		Other		Total
Company		Transaction	KWH	Demand(\$)		Charges(\$)		Charges(\$)		Charges(\$)
					_		_		_	
Sales										
DYNASTY POWER, INC.	DYNASTYPWR	Economy	520,000		\$	13,953.62	\$	12,195.76	\$	26,149.38
INDIANA MUNICIPAL POWER AGENCY	IMPA	Economy	313,000		\$	8,411.59	\$	7,351.90	\$	15,763.49
ENERGY IMBALANCE	IMBL	Economy	880,000		\$	14,266.62	\$	12,141.05	\$	26,407.67
MACQUARIECOOK	MACQUARIE	Economy	2,732,000		\$	69,405.38	\$	60,661.76	\$	130,067.14
MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.	MISO	Economy	32,619,000		\$	708,066.55	\$	614,137.75	\$	1,322,204.30
PJM INTERCONNECTION ASSOCIATION	PJM	Economy	16,049,000		\$	359,023.75	\$	313,794.37	\$	672,818.12
RAINBOW ENERGY MARKETING CORP	REMC	Economy	119,000		\$	2,281.78	\$	1,994.34	\$	4,276.12
THE ENERGY AUTHORITY	TEA	Economy	209,000		\$	4,481.93	\$	3,917.30	\$	8,399.23
TENNESSEE VALLEY AUTHORITY	TVA	Economy	18,158,000		\$	523,162.96	\$	457,255.52	\$	980,418.48
LOUISVILLE GAS & ELECTRIC	LGE	Economy	175,456,000		\$	3,620,156.79	\$	77.34	\$	3,620,234.13
Total Sales			247,055,000	\$ -	\$	5,323,210.97	\$	1,483,527.09	\$	6,806,738.06
4										



				Billing Components						
		Type of				Fuel		Other		Total
Company		Transaction	KWH	Demand(\$)		Charges(\$)		Charges(\$)		Charges(\$)
Sales										
EVERGY KANSAS CENTRAL, INC.	EVGY	Economy	271,000		\$	6,185.72	\$	6,426.67	\$	12,612.39
ENERGY IMBALANCE	IMBL	Economy	1,079,000		\$	16,341.83	\$	16,790.69	\$	33,132.52
MACQUARIECOOK	MACQUARIE	Economy	5,502,000		\$	151,839.15	\$	157,753.87	\$	309,593.02
MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.	MISO	Economy	29,775,000		\$	627,216.29	\$	651,648.80	\$	1,278,865.09
PJM INTERCONNECTION ASSOCIATION	PJM	Economy	22,778,000		\$	541,502.66	\$	562,596.26	\$	1,104,098.92
RAINBOW ENERGY MARKETING CORP	REMC	Economy	1,794,000		\$	44,971.01	\$	46,722.79	\$	91,693.80
THE ENERGY AUTHORITY	TEA	Economy	303,000		\$	6,126.63	\$	6,365.27	\$	12,491.90
TENNESSEE VALLEY AUTHORITY	TVA	Economy	4,647,000		\$	149,941.52	\$	155,782.32	\$	305,723.84
LOUISVILLE GAS & ELECTRIC	LGE	Economy	106,021,000		\$	2,270,809.38	\$	20.05	\$	2,270,829.43
Total Sales			172,170,000	\$ -	\$	3,814,934.19	\$	1,604,106.72	\$	5,419,040.91
4									-	I



					 Billing Component	ıts		
		Type of			 Fuel		Other	 Total
<u>Company</u>		Transaction	KWH	Demand(\$)	 Charges(\$)		Charges(\$)	 Charges(\$)
Sales								ſ
EVERGY KANSAS CENTRAL, INC.	EVGY	Economy	1,601,000		\$ 51,248.80	\$	67,866.05	\$ 119,114.85
ENERGY IMBALANCE	IMBL	Economy	1,164,000		\$ 14,843.04	\$	19,449.83	\$ 34,292.87
MACQUARIECOOK	MACQUARIE	Economy	2,175,000		\$ 49,281.00	\$	65,260.20	\$ 114,541.20
MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.	MISO	Economy	15,541,000		\$ 363,146.39	\$	480,850.04	\$ 843,996.43
PJM INTERCONNECTION ASSOCIATION	PJM	Economy	9,606,000		\$ 228,792.73	\$	302,977.89	\$ 531,770.62
RAINBOW ENERGY MARKETING CORP	REMC	Economy	780,000		\$ 17,522.28	\$	23,203.81	\$ 40,726.09
THE ENERGY AUTHORITY	TEA	Economy	8,000		\$ 133.32	\$	208.16	\$ 341.48
TENNESSEE VALLEY AUTHORITY	TVA	Economy	1,086,000		\$ 29,330.57	\$	38,840.90	\$ 68,171.47
LOUISVILLE GAS & ELECTRIC	LGE	Economy	86,511,000		\$ 1,946,422.04	\$	104.10	\$ 1,946,526.14
Total Sales			118,472,000	\$ -	\$ 2,700,720.17	\$	998,760.98	\$ 3,699,481.15
4					 			 · /



Kentucky Utilities Company

					Bill	ing Components		
		Type of				Fuel	Other	Total
<u>Company</u>		Transaction	KWH	Demand(\$)		Charges(\$)	 Charges(\$)	 Charges(\$)
Sales								
EVERGY KANSAS CENTRAL, INC.	EVGY	Economy	950,000		\$	29,176.86	\$ 50,323.14	\$ 79,500.00
ENERGY IMBALANCE	IMBL	Economy	817,000		\$	10,012.77	\$ 17,098.97	\$ 27,111.74
MACQUARIECOOK	MACQUARIE	Economy	7,797,000		\$	205,236.28	\$ 353,983.72	\$ 559,220.00
MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.	MISO	Economy	5,403,000		\$	137,157.39	\$ 236,556.75	\$ 373,714.14
PJM INTERCONNECTION ASSOCIATION	PJM	Economy	2,863,000		\$	82,700.28	\$ 142,637.06	\$ 225,337.34
RAINBOW ENERGY MARKETING CORP	REMC	Economy	700,000		\$	18,717.23	\$ 32,282.77	\$ 51,000.00
TENNESSEE VALLEY AUTHORITY	TVA	Economy	150,000		\$	4,037.05	\$ 6,962.95	\$ 11,000.00
LOUISVILLE GAS & ELECTRIC	LGE	Economy	254,169,000		\$	5,675,783.99	\$ -	\$ 5,675,783.99
Total Sales			272,849,000	-	\$	6,162,821.85	\$ 839,845.36	\$ 7,002,667.21

Response to Commission Staff's First Request for Information Dated March 31, 2022

Case No. 2022-00038

Question No. 14

Responding Witness: Andrea M. 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. 2012-00552².

² <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 First Request for Information Dated March 31, 2022

Case No. 2022-00038

Question No. 15

Responding Witness: Michael P. Drake

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

Kentucky Utilities Company

May 2021 through October 2021

Jnit and Outage Type F=Forced; S=Scheduled)		Schedu	led	Ac	tual*	HOURS OF	DURATION	REASON FOR DEVIATION FROM SCHEDULED MAINTENANCE
(F=Forced; S=Scheduled)	ŀ	FROM	то	FROM	то	Scheduled	Actual*	OR REASON FOR FORCED OUTAGE AS APPROPRIATE
		5 (11 (2021 22 15	5 /1 / / 0001 1 6 10	5 // / /2024 22 /5	E (1 1 (0 0 0 1 1 C 1 0			
E. W. Brown Unit 3 - Coal - 413 MW In-service July 1971	5	5/11/2021 22:15	5/14/2021 16:12	5/11/2021 22:15	5/14/2021 16:12	65:57		Boiler inspection
	F			5/19/2021 3:35	5/19/2021 12:19			Condenser Water Box Leak
	F			6/13/2021 0:36	6/13/2021 21:50			Boiler waterwall tube leak repair
	S	7/31/2021 7:56	8/1/2021 13:41	7/31/2021 7:56	8/1/2021 13:41	29:45		Boiler Feed Pump Piping Leak
	F			8/6/2021 6:36	8/7/2021 1:48			Boiler Door Gasket Leak
	F			8/8/2021 0:22	8/8/2021 19:12			Turbine EHC System
	S	9/3/2021 7:00	9/3/2021 15:38	9/3/2021 7:00	9/3/2021 15:38	8:38	8:38	Boiler waterwall tube leak
Ghent Unit 1 - Coal - 479 MW	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
In-service February 1974	S	5/10/2021 0:00	5/11/2021 7:40	5/10/2021 0:00	5/11/2021 7:40	31:40	31:40	Major turbine overhaul extension
	S	5/27/2021 20:31	5/29/2021 8:37	5/27/2021 20:31	5/29/2021 8:37	36:06	36:06	Turbine Fine Mesh Screen Removal
	F			8/12/2021 21:49	8/13/2021 12:13		14:24	Feedwater Valve Repair
	S	8/17/2021 10:18	8/17/2021 18:57	8/17/2021 10:18	8/17/2021 18:57	8:39	8:39	Low Pressure Service Water System Repairs
	F			8/28/2021 23:57	8/30/2021 12:26		36:29	Boiler Economizer Repair
	S	10/18/2021 22:17	10/19/2021 15:23	10/18/2021 22:17	10/19/2021 15:23	17:06	17:06	Circulating water line repair
Ghent Unit 2 - Coal - 486 MW	S	5/12/2021 22:57	5/14/2021 2:30	5/12/2021 22:57	5/14/2021 2:30	27:33	27:33	Condenser tube and waterbox cleaning
In-service April 1977	S	10/23/2021 0:00	11/28/2021 0:00	10/22/2021 21:05	11/21/2021 2:06	864:00	701:01	PJFF Bag Replacement
Ghent Unit 3 - Coal - 476 MW	S	9/25/2021 0:00	10/24/2021 0:00	9/24/2021 21:56	10/24/2021 8:52	696:00	706:56	Circulating Water Line Repairs
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	S	5/14/2021 21:58	5/18/2021 0:00	5/14/2021 21:58	5/18/2021 0:00	74:02	74:02	Air heater fouling
	S	5/18/2021 0:00	5/25/2021 16:27	5/18/2021 0:00	5/25/2021 16:27	184:27	184:27	Air heater fouling
	F			9/18/2021 1:30	9/19/2021 16:55		39:25	Boiler finishing superheat tube leak repair
Trimble County Unit 2 - Coal - 570 MW		No outages > or = 6 hours						
In-service January 2011								
75% ownership share of 732 MW jointly owned with LG&E								
Cane Run Unit 7 - Gas - 683 MW	S	5/6/2021 21:38	5/11/2021 0:01	5/6/2021 21:38	5/11/2021 0:01	98:23	98:23	HRSG Hot Reheat Steam Valve Repair
In-service June 2015	S	5/11/2021 0:01	5/12/2021 15:09	5/11/2021 0:01	5/12/2021 15:09	39:08	39:08	HRSG Hot Reheat Steam Valve Repair
Jointly owned with LG&E	S	10/30/2021 0:00	11/21/2021 0:00	10/29/2021 23:22	11/21/2021 16:24	528:00	545:02	HRSG Kettle Boiler Replacement
E. W. Brown Unit 5 - Gas CT - 130 MW	F			7/16/2021 9:44	7/20/2021 10:30		96:46	Control system
In-service June 2001	F			7/20/2021 18:07	7/23/2021 15:26		69:19	Generator protection relay
Jointly owned with LG&E								
E. W. Brown Unit 6 - Gas CT - 171 MW	S	10/18/2021 7:23	10/22/2021 0:00	10/18/2021 7:23	10/22/2021 0:00	88:37	88:37	Borescope inspection
In-service August 1999	S	10/22/2021 0:00	10/22/2021 8:50	10/22/2021 0:00	10/22/2021 8:50	8:50	8:50	Borescope inspection
Jointly owned with LG&E								
E. W. Brown Unit 7 - Gas CT - 171 MW	F			6/20/2021 14:38	6/22/2021 8:00		41:22	Compressor blowoff valve repair
In-service August 1999	S	6/22/2021 8:00	6/24/2021 12:44	6/22/2021 8:00	6/24/2021 12:44	52:44	52:44	Quench Water Cooler Leak Repair
Jointly owned with LG&E	S	8/6/2021 6:00	8/6/2021 13:10	8/6/2021 6:00	8/6/2021 13:10	7:10	7:10	Fuel Gas System
	S	9/17/2021 6:31	9/17/2021 13:47	9/17/2021 6:31	9/17/2021 13:47	7:16	7:16	
	S	10/19/2021 6:15	10/19/2021 13:22	10/19/2021 6:15	10/19/2021 13:22	7:07	7:07	Compressor washing
	S	10/22/2021 8:50	10/23/2021 0:00	10/22/2021 8:50	10/23/2021 0:00	15:10	15:10	Hot gas path inspection
	s	10/23/2021 0:00	12/13/2021 0:00	10/23/2021 0:00	12/13/2021 12:24	1224:00	1236:24	Hot gas path inspection

f. W. Boom Unit 9- Gas CT - 128 WW No stages or = 5 koos f. W. Boom Unit 9- Gas CT - 128 WW No stages or = 6 koos f. W. Boom Unit 9- Gas CT - 128 WW No stages or = 6 koos f. W. Boom Unit 10- Gas CT - 128 WW No stages or = 6 koos f. W. Boom Unit 10- Gas CT - 128 WW No stages or = 6 koos f. W. Boom Unit 10- Gas CT - 14 WW No stages or = 6 koos f. M. Boom Unit 10- Gas CT - 14 WW No stages or = 6 koos f. M. Boom Unit 10- Gas CT - 14 WW No stages or = 6 koos f. M. Boom Unit 10- Gas CT - 14 WW No stages or = 6 koos f. M. Boom Unit 10- Gas CT - 14 WW No stages or = 6 koos f. M. Boom Unit 10- Gas CT - 14 WW No stages or = 6 koos f. M. Boom Unit 10- Gas CT - 14 WW No stages or = 6 koos f. M. Boom Unit 10- Gas C				1					
E. W. Brown Unit 9 - Ger. CT. 138 MW No datages or - 6 hours No. No. No. No. E. W. Brown Unit 10 - Gar. CT. 138 MW No backges or - 6 hours Image: Second Unit 1 - Gar. CT. 138 MW No. Images or - 6 hours Images or - 6 hours Image: Second Unit 1 - Gar. CT. 138 MW No. Images or - 6 hours Images or - 6 hours </th <th></th> <th>Ш</th> <th>No outages > or = 6 hours</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>		Ш	No outages > or = 6 hours						
In service January 1995 Image: Control of Sec T1 38 W Mondpare Sec = 6 hours Image: Control of Sec T1 38 W Mondpare Sec = 6 hours In service May 1996 Mondpare Sec = 6 hours Image: Control of Sec T1 38 W Mondpare Sec = 6 hours Image: Control of Sec T1 38 W Mondpare Sec = 6 hours Image: Control of Sec T1 38 W Mondpare Sec = 6 hours Image: Control of Sec T1 38 W Mondpare Sec = 6 hours Image: Control of Sec T1 38 W Mondpare Sec = 6 hours Image: Control of Sec T1 38 W Mondpare Sec = 6 hours Image: Control of Sec T1 38 W Image: Control of Sec T1 38 W Mondpare Sec = 6 hours Image: Control of Sec T1 38 W Image: Control of Sec T1 38 W Mondpare Sec = 6 hours Image: Control of Sec T1 38 W Image: Control of Sec T1 38 W Mondpare Sec = 6 hours Image: Control of Sec T1 38 W Image: Control of Sec T1 38 W Image: Control of Sec T1 38 W Major control of Sec T1 38 W Image: Control of Sec T1 38 W Image: Control of Sec T1 38 W Image: Control of Sec T1 38 W Major control of Sec T1 38 W Image: Control of Sec T1 38 W	· · · · · · · · · · · · · · · · · · ·								
E.W. Brown Unit 10 - Gas CT - 138 BW No obsgips 2 or 6 hours Image: Descention of the sector of the			No outages > or = 6 hours						
in service December 1995 I <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>									
E. W. Brown Unit 1 - Gas CT - 128 MW No oxages > 0 = 0 how Image: Mark Stress			No outages > or = 6 hours						
In-service May 1996 Image March 100 Image									
Haefing Junit 1 - Gas CT - 14 MW F Partice CDF-Value 2146 (T Cooling System Inservice CODE-Value No obligs > or = 6 hours No			No outages > or = 6 hours						
In-service October 1970 Image: Control 1970 </th <th>-</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	-								
Inservice October 1970 No extages > or = 6 hours No extages > or = 6 hours In-service October 1970 No extages > or = 6 hours No extages > or = 6 hours No extages > or = 6 hours In-service June 2001 No extages > or = 6 hours No extages > or = 6 hours No extages > or = 6 hours In-service June 2001 S //1/2021 1000 S //1/2021 754 4/22/2021 1000 S //1/2021 754 4/25/5 Major overhaul - testing and commissioning In-service May 2002 S //1/2021 1020 S //1/2021 1422 S //1/2021 1423 S //1/2021 1423 S //1/2021 1424 S //1/20	, , , , , , , , , , , , , , , , , , ,	F			7/15/2021 14:35	7/16/2021 12:21		21:46	CT Cooling System
In-service October 1970 Image Service October 1970									
Paddys Run Unit 13 - Gas CT - 175 MW In service May 2002 In service May 2002 S 5/10/2021 19:53 5/11/2021 444 8.55 BSS Major overhaul - testing and commissioning Jointly owned with LG&E 5 5/10/2021 754 4/22/2021 10:00 5/10/2021 754 4/2954 4/255 Major overhaul - testing and commissioning Jointly owned with LG&E 5 5/11/2021 1442 5/12/2021 730 5/11/2021 1442 5/22/2021 730 S/11/2021 1442 S/22/2021 730 S/11/2021 1442 S/22/2021 730 S/11/2021 1442 S/22/2021 730 S/11/2021 1422 S/22/2021 730 S/11/2021 1424 S/22/2021 730 S/11/2021 1424 S/22/2021 730 S/11/2021 1424 S/22/2021 730	5		No outages > or = 6 hours						
In-service June 2001 Jointly owned with LG&E Image of the sector of the se									
Jointly owned with LG&E Image: Control of the County Unit 5 - Gas CT - 179 MW S 4/2/2/021 1000 5/10/2021 7:54 4/22/2021 1000 5/10/2021 7:54 4/25/4 Major overhaul - testing and commissioning Jointly owned with LG&E 5 5/10/2021 1730 5/11/2021 1448 5/10/2021 1730 5/11/2021 1422 5/11/2021 1423 30145 30145 Major Overhaul - testing and commissioning Inservice May 2002 5 5/27/2021 1700 5/27/2021 1700 5/27/2021 1700 5/27/2021 1700 10/16/2021 1701 Major Overhaul - testing and commissioning Inservice May 2002 Inservice May 2002 Inservice May 2002 Inservice May 200		Ш	No outages > or = 6 hours						
Trimble County Unit 5 - Gas CT - 179 MW S 4/22/2021 10:00 5/10/2021 7:54 4/22/2021 10:00 5/10/2021 7:54 4/29:54 Major overhaul - testing and commissioning In-service May 2002 S 5/10/2021 19:33 5/11/2021 14:24 5/10/2021 7:35 5/11/2021 14:24 8:55 8:55 Major overhaul - testing and commissioning S 5/11/2021 14:22 5/12/2021 17:20 5/25/2021 7:30 5/11/2021 14:24 5/12/2021 7:30 30:145 30:145 Major Overhaul - testing and commissioning S 5/11/2021 14:22 5/12/2021 7:120 5/25/2021 7:105 5/12/2021 7:19 30:145 Major Overhaul - testing and commissioning S 5/27/2021 1100 5/27/2021 1207 5/28/2021 7:19 10:12 Major Overhaul - testing and commissioning In-service May 2002 No outages > or = 6 hours No outages > 0 = 6 hours <th></th> <th>Щ</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>		Щ							
In-service May 2002 Jointly owned with LG&E S S/10/2021 19:53 S/11/2021 448 S/10/2021 19:53 S/11/2021 14:22 S/11/2021 14:24 BS/S Major overhaul - testing and commissioning Jointly owned with LG&E S 5/11/2021 14:22 5/12/2021 7:30 5/11/2021 14:22 5/12/2021 7:30 30145 Major Overhaul - testing and commissioning S 5/25/2021 11:00 S/27/2021 6:58 S/25/2021 7:19 5/25/2021 7:19 30145 Major Overhaul - testing and commissioning Timble County Unit 6 - Gas CT - 179 MW No outages > ce fhours S 5/27/2021 2:107 5/28/2021 7:19 10:12 Major Overhaul - testing and commissioning Jointly owned with LG&E No outages > ce fhours No No outages > ce fhours No									
Jointly owned with L&&E Joint Section Joint Section <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>									
s 3 3/17/2021 1422 3/12/2021 1/30 3/12/2021 1/32 5/12/2021 1/32 17.05		S							, , , , , , , , , , , , , , , , , , , ,
S 5/25/2021 11:00 5/27/2021 6:80 5/27/2021 6:80 43:50 Major Overhaul - testing and commissioning Trimble County Unit 6 - Gas CT - 179 MW No outages > or = 6 hours Major Overhaul - testing and commissioning Jointy owned with LG&E No outages > or = 6 hours	Jointly owned with LG&E	S	5/11/2021 14:22	5/12/2021 7:30	5/11/2021 14:22	5/12/2021 7:30	17:08	17:08	Major Overhaul - testing and commissioning
S \$\frac{\}\}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}		S	5/12/2021 17:20	5/25/2021 7:05	5/12/2021 17:20	5/25/2021 7:05	301:45	301:45	Major Overhaul - testing and commissioning
Trimble County Unit 6 - Gas CT - 179 MW No outages > or = 6 hours		S	5/25/2021 11:00	5/27/2021 6:58	5/25/2021 11:00	5/27/2021 6:58	43:58	43:58	Major Overhaul - testing and commissioning
In-service May 2002 Jointy owned with LG&E Image: Construct of the service June 2004 Jointy owned with LG&E S 6/1/2021 0:23 6/2/2021 7:50 6/1/2021 0:23 6/2/2021 7:50 31:27 Turbine Generator Alignment In-service June 2004 Jointy owned with LG&E S 6/1/2021 0:23 6/2/2021 7:50 6/2/2021 7:50 31:27 Turbine Generator Alignment In-service June 2004 Jointy owned with LG&E S 6/2/2021 10:11 6/4/2021 7:54 6/2/2021 11:00 10/9/2021 1:30 9/1/2021 1:4:24 45:43 Turbine Generator Alignment S 9/1/2021 3:00 9/1/2021 1:4:24 9/1/2021 1:4:24 9/1/2021 1:4:24 11:24 11:24 Starting System - Load Commutated Inverter S 10/9/2021 2:30 10/9/2021 1:00 10/9/2021 1:30 9/1/2021 1:4:24 11:24 11:24 Starting System - Load Commutated Inverter In-service June 2004 S 9/1/2021 1:00 10/9/2021 1:00 10/9/2021 1:00 9/1/2021 1:53 9/1/2021 1:51 12:41 12:41 12:41 12:41 12:41 12:41 12:41 12:41 12:41 12:41 12:41 12:41 12:41 12:41 12:41 12:41 12:41 12:41 12:41		S	5/27/2021 21:07	5/28/2021 7:19	5/27/2021 21:07	5/28/2021 7:19	10:12	10:12	Major Overhaul - testing and commissioning
Jointly owned with LG&E C C C Trimble County Unit 7 - Gas CT - 179 MW S 6/1/2021 0:23 6/2/2021 7:50 31:27 31:27 Turbine Generator Alignment In-service June 2004 S 6/2/2021 10:11 6/4/2021 7:54 6/2/2021 10:11 6/4/2021 7:54 45:43 Turbine Generator Alignment Jointly owned with LG&E F 8/26/2021 14:33 8/26/2021 12:30 6:57 Gas Turbing System - Load Commutated Inverter S 9/1/2021 3:00 9/1/2021 14:24 9/1/2021 14:24 9/1/2021 14:24 11:24 Starting System - Load Commutated Inverter S 10/9/2021 2:30 10/9/2021 1:42 9/1/2021 14:24 11:24 Starting System - Load Commutated Inverter S 10/9/2021 0:00 11/7/2021 0:00 10/9/2021 1:40 11/6/2021 7:59 528:00 514:19 Gas turbine control system upgrades Trimble County Unit 8 - Gas CT - 179 MW S 9/1/2021 1:50 9/9/2021 2:25 9/9/2021 1:50 12:38 12:38 Inter air manifold inspection Jointly owned with LG&E S 10/9/2021 0:00 11/2/1/2021 0:00 1	Trimble County Unit 6 - Gas CT - 179 MW		No outages > or = 6 hours						
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In-service July 2004 Image: Constraint of the service	Trimble County Unit 9 - Gas CT - 179 MW	F			6/28/2021 20:49			35:25	Generator Seal Oil System
Jointly owned with LG&E Image: Control of the system - purge value Trimble County Unit 10 - Gas CT - 179 MW F 5/20/2021 21:07 5/21/2021 8:11 11:04 Fuel Gas System - purge value		H			-, -,				- ,
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In-service July 2004	Trimble County Unit 10 - Gas CT - 179 MW	F			5/20/2021 21:07	5/21/2021 8:11		11:04	Fuel Gas System - purge valve
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Jointly owned with LG&E	Jointly owned with LG&E	H							

Response to Commission Staff's First Request for Information Dated March 31, 2022

Case No. 2022-00038

Question No. 16

Responding Witness: Stuart A. Wilson

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

A-16. See table below.

		Capacity Factor (%) (Net MWh)/(period hours x MW rating)									
	May 2021										
Brown 3	25.5	33.4	41.0	29.8	3.2	38.9					
Brown 5	0.7	1.8	1.9	3.3	0.2	0.0					
Brown 6	1.0	3.0	8.0	12.5	2.7	1.8					
Brown 7	3.3	8.9	8.9	5.1	4.2	6.0					
Brown 8	0.0	1.2	0.7	0.9	0.0	0.0					
Brown 9	0.4	1.5	2.1	0.0	0.0	0.3					
Brown 10	0.4	0.5	0.7	0.2	0.0	0.2					
Brown 11	0.0	1.5	0.2	0.0	0.4	0.0					
Brown Solar	25.3	24.5	24.9	22.4	21.6	16.3					
Cane Run 7	72.7	88.6	70.1	72.5	82.6	87.6					
Dix 1	2.1	2.5	16.8	3.5	8.8	52.7					
Dix 2	2.1	2.5	16.7	3.5	8.8	52.7					
Dix 3	2.1	2.4	16.6	3.5	0.0	0.0					
Ghent 1	35.7	86.1	91.0	83.7	82.6	83.4					
Ghent 2	56.6	72.4	80.8	81.6	67.2	54.1					
Ghent 3	70.5	73.5	83.0	82.2	56.1	18.9					
Ghent 4	31.8	65.6	76.8	78.4	58.8	73.2					
Haefling 1-2	0.0	0.0	0.3	0.0	0.0	0.0					
Paddy's Run 13	1.9	1.7	4.4	7.3	2.3	2.0					
Trimble County 2	86.0	85.7	89.6	91.4	92.1	95.2					
Trimble County 5	7.1	5.9	17.2	8.6	3.3	5.1					
Trimble County 6	3.3	5.4	11.5	20.0	9.7	17.3					
Trimble County 7	2.0	4.0	13.3	15.7	6.8	12.4					
Trimble County 8	5.8	9.6	2.3	17.0	0.5	0.0					
Trimble County 9	0.6	1.7	8.2	14.2	5.8	10.1					
Trimble County 10	0.7	1.3	1.6	5.0	1.3	1.1					

Response to Question No. 16 Page 2 of 2 Wilson

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

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

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

Response to Commission Staff's First Request for Information Dated March 31, 2022

Case No. 2022-00038

Question No. 17

Responding Witness: Michael P. Drake

- Q-17. For the period under review, 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. If so, 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. KU strives to maintain unit efficiency through routine cyclic planned outage maintenance. This maintenance work continues to focus on reestablishing expected turbine efficiency through continuous monitoring of all 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 issues through resolution. In evaluating potential major component projects or replacements that may impact efficiency, KU must balance any potential efficiency benefit associated with the project against both costs and potential implications under the Clean Air Act. KU has not realized any efficiency improvements through major component projects during this period.

Response to Commission Staff's First Request for Information Dated March 31, 2022

Case No. 2022-00038

Question No. 18

Responding Witness: Delbert Billiter / Charles R. Schram

- Q-18. State whether KU is aware of any violations of its policies and procedures regarding fuel procurement that occurred prior to or during the 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 First Request for Information Dated March 31, 2022

Case No. 2022-00038

Question No. 19

Responding Witness: Andrea M. 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 First Request for Information Dated March 31, 2022

Case No. 2022-00038

Question No. 20

Responding Witness: Andrea M. 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.

Response to Commission Staff's First Request for Information Dated March 31, 2022

Case No. 2022-00038

Question No. 21

Responding Witness: Delbert Billiter

Q-21. Refer to KRS 278.277(1) which states that:

In any review by the commission of any fuel adjustment clause, for any contracts entered into on or after July 1, 2021, the commission shall, in determining the reasonableness of fuel costs in procurement contracts and fuel procurement practices, evaluate the reasonableness of fuel costs in contracts and competing bids based on the cost of the fuel less any coal severance tax imposed by any jurisdiction.

- a. Provide a listing of any new coal contracts entered into on or since July 1, 2021.
- b. For each bid solicitation or potential spot purchase that resulted in a new purchase contract on or after July 1, 2021, provide the bid evaluation sheets that include:
 - (1) The coal severance tax rate being levied, if any;
 - (2) The coal severance tax rate per ton or MMBTU, as appropriate, being levied;
 - (3) The cost per ton or MMBTU, as appropriate, including any severance tax; and
 - (4) The cost per ton or MMBTU, as appropriate, excluding any severance tax.

Solicitation Date	Contract #	Signature Date	Company
8/6/2021	J21028	9/23/2021	Alliance Coal, LLC
8/6/2021	J22003	12/13/2021	Peabody Coalsales, LLC
9/21/2021	J22004	12/7/2021	Alliance Coal, LLC
9/21/2021	J20001/Amend #1	12/22/2021	Iron Senergy Coal Sales
9/21/2021	J23004	2/15/2022	Alliance Coal, LLC
9/21/2021	J23002	2/14/2022	Knight Hawk Coal , LLC
9/21/2021	J23003	3/31/2022	Peabody COALSALES, LLC

A-21.

a.

b. See attached.

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.