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 POWER COMPANY) Case No. 2023-00008
FROM NOVEMBER 1, 2020 THROUGH)
OCTOBER 31, 2022)

ERRATA DIRECT TESTIMONY OF

SCOTT E. BISHOP

ON BEHALF OF KENTUCKY POWER COMPANY

ERRATA DIRECT TESTIMONY OF SCOTT E. BISHOP ON BEHALF OF KENTUCKY POWER COMPANY BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

CASE NO. 2023-00008

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I. INTRODUCTION

1	Q.	PLEASE STATE YOUR NAME, POSITION WITH KENTUCKY POWER
2		COMPANY, AND BUSINESS ADDRESS.
3	A.	My name is Scott E. Bishop. My position is Regulatory Consultant Senior for
4		Kentucky Power Company ("Kentucky Power" or the "Company"). My business
5		address is 1645 Winchester Avenue, Ashland, Kentucky 41101.
		II. <u>BACKGROUND</u>
6	Q.	PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND
7		BUSINESS EXPERIENCES.
8	A.	I received a Bachelor of Arts degree in Economics from The Ohio State University
9		in 1992 and a Master of Business Administration degree from Ohio Dominican

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I received a Bachelor of Arts degree in Economics from The Ohio State University in 1992 and a Master of Business Administration degree from Ohio Dominican University in 2004. I began my utility industry career with American Electric Power Service Corporation ("AEPSC") in October 1998 as a Cash Management Analyst with responsibility for determining the corporation's daily cash position. In 2000, I transferred to the Trusts and Investments Department as an Investment Analyst. My duties included staying abreast of pending legislation and litigation that could affect AEP benefits and performing analysis and reporting for the corporate investment committee. I also worked as an Analyst in other departments where my work included

1		the analysis of spending trends, and creation of complex financial models. In January
2		2010, I accepted the position of Demand Side Management ("DSM") / Energy
3		Efficiency Coordinator for AEPSC. In October 2010, I transferred to Kentucky
4		Power. My duties included developing, issuing, and evaluating requests for proposals
5		for potential DSM programs and third-party managers. I also implemented and
6		managed new DSM programs, managed program budgets, assisted with Public Service
7		Commission of Kentucky ("Commission") filings and status reports, supported the
8		preparation of responses to Commission data requests and inquiries, and assisted with
9		testimony development. In April 2018, I assumed my current position as Regulatory
10		Consultant Senior for Kentucky Power.
11	Q	WHAT ARE YOUR PRINCIPAL AREAS OF RESPONSIBILITY WITH
12		KENTUCKY POWER?
13	A.	My primary responsibility is to support the Company's regulatory activities. As part of
14		this responsibility, I prepare the Company's monthly fuel adjustment clause ("FAC")
15		filings with the Commission. Additionally, I assist with the Company's other periodic
16		Commission regulatory filings.
17	Q.	HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY OR RESPONSES TO
18		DATA REQUESTS IN ANY REGULATORY PROCEEDING?
19	A.	Yes. I submitted testimony in the last four Demand Side Management proceedings
20		(Case Nos. 2019-00410, 2020-00362, 2021-00420, and 2022-00392), the Company's
21		last base rate case (Case No. 2020-00174), the Company's current base rate case (Case
22		No. 2023-00159), and sponsored discovery responses in the Company's last two 6-
23		month FAC review cases (Case Nos. 2022-00036 and 2022-00263, respectively).

III. PURPOSE OF TESTIMONY

1 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

- 2 A. I am supporting the Company's decision to increase the base fuel rate.
- The remaining subjects identified in the Commission's September 6, 2023
- 4 Order are addressed by Company Witnesses Chilcote, Stutler, Vaughan, Rosenberger,
- 5 Mell, and Burkholder as follows:

	Ordering	
Witness	Paragraph Item 6	Description
	Topic	
	N/A	Overview of the coal market during the Review Period;
	a	The reasonableness of Kentucky Power's coal procurement practices during the Review Period;
	ь	Coal suppliers' adherence to contract delivery schedules during the Review Period;
	c	Kentucky Power's efforts to ensure coal suppliers' adherence to contract delivery schedules during the Review Period;
Kimberly K. Chilcote	d	Kentucky Power's efforts to maintain the adequacy of its coal supplies in light of any coal supplier's inability or unwillingness to make contract coal deliveries; and
	e	Any changes in coal market conditions that occurred during the Review Period or that Kentucky Power expects to occur within the next two years that have significantly affected or will significantly affect Kentucky Power's coal procurement practices.
	N/A	Overview of the natural gas market during the Review Period; and
Clinton M. Stutler	a	The reasonableness of Kentucky Power's natural gas procurement practices during the Review

Period.

	f	Any changes in the wholesale electric power market that occurred during the Review Period or that Kentucky Power expects to occur within the next two years that have significantly affected or will significantly affect Kentucky Power's electric power procurement practices;
Alex E. Vaughan	g	Actions taken by Kentucky Power to mitigate high fuel or purchased power related costs for its customers;
	h	Any capacity and energy shortfalls resulting from planned outages at Mitchell or Big Sandy that extended beyond the estimated time of the outage;
	i	Whether Kentucky Power engaged in any off systems sales or intersystem sales to offset high fuel or power costs during the period under review; and
	j	How Kentucky Power bids its generating units into PJM energy markets.
Douglas J. Rosenberger	h	Any planned outages at the Mitchell Plant that extended beyond the estimated time of the outage and how Kentucky Power addressed the extended outage,
David L. Mell	h	Any planned outages at the Big Sandy Plant that extended beyond the estimated time of the outage and how Kentucky Power addressed the extended outage; and
	k	How coal consumption is recorded for a unit that is in reserve shutdown.
Joshua D. Burkholder	1	Any cost-benefit analysis Kentucky Power has performed regarding its participation in PJM.

IV. BASE FUEL RATE

1 Q. WHAT IS THE COMPANY'S CURRENT BASE FUEL RATE, AND WHEN

2 DID THE COMPANY LAST MODIFY IT?

- 3 A. In its August 2, 2021 Order in Case No. 2021-00053, the Commission approved the
- 4 Company's current base fuel rate of 2.612 cents per kilowatt-hour ("kWh"), which was
- 5 a decrease from the previously-approved rate of 2.851 cents per kWh. The current base

1		fuel rate of 2.612 cents per kWh was placed into effect for service rendered on or after
2		August 1, 2021.
3	Q.	WHAT BASE FUEL RATE IS THE COMPANY PROPOSING IN THIS CASE?
4	A.	As demonstrated in the Company's October 6, 2023 response to the Commission's data
5		request Item No. 23 ("KPSC 1-23"), the Company is proposing to increase the base
6		fuel rate from 2.612 cents per kWh to 3.380 cents per kWh.
7	Q.	WHAT MONTH IS THE COMPANY USING AS THE BASE PERIOD FOR
8		THE PROPOSED CHANGE IN ITS BASE FUEL COST?
9	A.	As set forth in the Company's response to KPSC 1-23, the Company used January 2022
10		as the representative review period (November 2020 through October 2022, "Review
11		Period") month for the base period.
10		
12	Q.	PLEASE DESCRIBE THE PROCESS THE COMPANY USED IN REACHING
13	Q.	ITS RECOMMENDATION TO INCREASE ITS CURRENT BASE FUEL
	Q.	
13	Q. A.	ITS RECOMMENDATION TO INCREASE ITS CURRENT BASE FUEL
13 14		ITS RECOMMENDATION TO INCREASE ITS CURRENT BASE FUEL RATE TO 3.380 CENTS PER KWH.
13 14 15		ITS RECOMMENDATION TO INCREASE ITS CURRENT BASE FUEL RATE TO 3.380 CENTS PER KWH. Kentucky Power focused its review on historical fuel costs for the entire 24-month
13 14 15 16		ITS RECOMMENDATION TO INCREASE ITS CURRENT BASE FUEL RATE TO 3.380 CENTS PER KWH. Kentucky Power focused its review on historical fuel costs for the entire 24-month Review Period that is the subject of this proceeding, as well as the Company's
13 14 15 16 17	A.	ITS RECOMMENDATION TO INCREASE ITS CURRENT BASE FUEL RATE TO 3.380 CENTS PER KWH. Kentucky Power focused its review on historical fuel costs for the entire 24-month Review Period that is the subject of this proceeding, as well as the Company's forecasted cost of fuel for calendar years 2023, 2024, and 2025.
13 14 15 16 17 18	A.	ITS RECOMMENDATION TO INCREASE ITS CURRENT BASE FUEL RATE TO 3.380 CENTS PER KWH. Kentucky Power focused its review on historical fuel costs for the entire 24-month Review Period that is the subject of this proceeding, as well as the Company's forecasted cost of fuel for calendar years 2023, 2024, and 2025. WHAT WERE THE COMPANY'S FUEL COSTS DURING THE TWO-YEAR
13 14 15 16 17 18	A. Q.	ITS RECOMMENDATION TO INCREASE ITS CURRENT BASE FUEL RATE TO 3.380 CENTS PER KWH. Kentucky Power focused its review on historical fuel costs for the entire 24-month Review Period that is the subject of this proceeding, as well as the Company's forecasted cost of fuel for calendar years 2023, 2024, and 2025. WHAT WERE THE COMPANY'S FUEL COSTS DURING THE TWO-YEAR REVIEW PERIOD?

Table SEB-1					
Month & Year	Final Cost	Total Sales kWh	Monthly Fuel Rate in Cents per kWh (C2) / (C3)	Base Fuel Rate Cents per kWh	Cents per kWh (Below) or Above Base Fuel Rate (C4) - (C5)
1	2	3	4	5	6
November 2020	9,966,635	402,448,122	2.477	2.851	(0.374)
December 2020	14,777,906	524,192,278	2.819	2.851	(0.032)
January 2021	15,124,428	539,353,036	2.804	2.851	(0.047)
February 2021	16,531,741	486,722,816	3.397	2.851	0.546
March 2021	12,875,086	435,529,780	2.956	2.851	0.105
April 2021	11,062,619	378,251,895	2.925	2.851	0.074
May 2021	10,323,161	377,519,768	2.734	2.851	(0.117)
June 2021	12,922,780	416,164,022	3.105	2.851	0.254
July 2021	14,690,458	454,066,108	3.235	2.851	0.384
August 2021	15,152,462	463,416,762	3.270	2.612	0.658
September 2021	13,582,685	394,147,678	3.446	2.612	0.834
October 2021	17,191,990	357,113,123	4.814	2.612	2.202
November 2021	25,159,458	424,392,684	5.928	2.612	3.316
December 2021	15,760,531	459,691,976	3.428	2.612	0.816
January 2022	19,529,185	577,776,513	3.380	2.612	0.768
February 2022	19,267,537	468,782,836	4.110	2.612	1.498
March 2022	22,440,362	442,400,243	5.072	2.612	2.460
April 2022	19,061,024	388,747,791	4.903	2.612	2.291
May 2022	22,099,904	415,884,310	5.314	2.612	2.702
June 2022	24,224,405	449,598,270	5.388	2.612	2.776
July 2022	21,149,807	478,525,653	4.420	2.612	1.808
August 2022	26,360,992	469,359,131	5.616	2.612	3.004
September 2022	26,562,836	404,267,144	6.571	2.612	3.959
October 2022	26,525,640	405,052,299	6.549	2.612	3.937
Two Year Average			4.111		1.409
Two Year Median			3.437		0.825
Avg. using Base Fuel Rate of 2.851 Cents per kWh			2.939		0.088
Avg. using Base Fuel Rate of 2.612 Cents per kWh			4.814		2.202

The average fuel cost for the two-year Review Period was 4.111 cents per kWh, which
was 1.499 cents more than the current base fuel rate. The median fuel cost for the twoyear Review Period was 3.437 cents per kWh, which was 0.825 cents more than the
current base fuel rate.

During the two-year Review Period, the cost of fuel fluctuated between a high of 6.571 cents per kWh (September 2022) to a low of 2.477 cents per kWh (November 2020). This represents fluctuations from as high as 151.6% above the current rate to as low as 5.2% below the current rate. In 23 of the 24 months of the Review Period, the monthly fuel rate was more than the current base fuel rate of 2.612 cents per kWh. Company Witnesses Vaughan, Stutler, and Chilcote provide further information on the drivers of this volatility in fuel costs during the Review Period. Significant fluctuations such as those experienced during the two-year Review Period increase the month-overmonth volatility in customers' bills and can create uncertainty for customers when budgeting their monthly expenses—particularly residential customers.

Because of the amount of volatility and sometimes outlier fuel costs during the Review Period, the Company determined that it would be reasonable and prudent to also review projected fuel costs for 2023, 2024, and 2025 in order to determine whether this degree of volatility and high fuel costs are expected to continue and to what extent they should be considered when proposing to update the base fuel rate.

Q. WHAT ARE THE COMPANY'S 2023, 2024, AND 2025 PROJECTED FUEL COSTS?

The Company's projected fuel costs for calendar years 2023, 2024, and 2025 are 3.50294 cents per kWh, 3.43120 cents per kWh, and 3.53881 cents per kWh, respectively. As reflected in **Table SEB-2** below, 2023 through 2025 fuel cost projections are approximately 31.4% to 35.5% *higher* than the current base fuel rate of 2.612 cents per kWh.

A.

	Table SEB-2					
			Fuel Cost a	and Sales Project	tions	
	ear of ojection	Projected Fuel Cost	Projected kWh Sales	Projected Fuel Cost in cents/kWh	Fuel Cost in Current Base Rates in cents/kWh	Difference in Fuel Cost in cents/kWh
	2023	\$82,170,441	2,345,757,000	3.50294	2.612	0.89094
	2024	\$204,433,963	5,958,086,000	3.43120	2.612	0.81920
	2025	\$226,709,941	6,406,396,000	3.53881	2.612	0.92681
A	verage			3.49098	2.612	0.87898
1				-	elow the average fu	_
2		Review Period (4.111 cents per k	(Wh). But, they a	re relatively in line	e with the median
3		fuel cost during	the Review Perio	od (3.437 cents pe	er kWh).	
4	Q.	IS IT REASO	NABLE TO LE	CAVE THE CUI	RRENT BASE F	UEL RATE OF
5		2.612 CENTS PER KWH UNCHANGED IN LIGHT OF THE COMPANY'S				
6		FUEL COSTS DURING THE REVIEW PERIOD AND PROJECTED FUEL				
7		COSTS FOR 2	023 THROUGH	1 2025?		
8	A.	No. The current base fuel rate is 1.499 cents per kWh (57.4%) lower than the average				
9		fuel cost during the 24-month Review Period. It is also 0.87898 cents per kWh (25.2%)				
10		lower than the forecasted 2023-2025 average cost of fuel.				
11	After reviewing the current market and projected fuel costs, leaving the current					
12		base fuel rate unchanged would likely result in increased FAC rates and increased				
13		month-over-month FAC rate volatility.				
14	Q.	WHAT BASE	FUEL RATE DO	OES THE COM	PANY PROPOSE	??
15	A.	The January 20	22 average fuel	cost (3.380 cent	s per kWh) was t	he closest to the
16		approximate median fuel cost (3.437 cents per kWh) during the Review Period. It also				

was the Review Period month that was closest to the average (3.49098 cents per kWh)

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1	of projected fuel costs for 2023 through 2025. Finally, there were no forced outages at
2	any of the Company's generating units during January 2022 that would otherwise skew
3	or affect the reliability of the fuel costs as representative. Based on this data, the
4	Company proposes 3.380 cents per kWh as the base fuel rate going forward.

5 Q. IS THE PROPOSED BASE FUEL RATE OF 3.380 CENTS PER KWH 6 REASONABLE?

A.

Yes. Monthly fuel costs can vary widely; however, there was exceptional volatility (as discussed by Company Witness Vaughan) during this Review Period. Accordingly, it is not reasonable to base the going-forward base fuel rate entirely on the Company's historical average during the Review Period, as the Company has done in the past. Instead, the Company aimed to choose a representative month that would best reflect expected going-forward rates in order to limit the volatility of (or, in other words, to smooth out) the charge or credit that appears on customers' bills for the FAC. Consequently, the proposed base fuel rate of 3.380 cents per kWh was chosen because it is both: a) closest to the historical median during the Review Period (which better ensures outlier months do not disproportionately affect the data than the average would), and b) most closely approximates the average for projected fuel costs for 2023 through 2025, which the Company expects to remain relatively flat.

Further, even if the Company's historical approach of choosing the closest month to the two-year average were used, January 2022 would still represents the month closest to the two-year average of 4.111, and that also does not contain any forced outages. In addition, while there was a forced outage that lasted approximately 19 hours at the Company's Big Sandy Unit 1 during January 2022, the Company was

1		not required to make any power purchases in excess of what its owned generating units
2		could supply to serve native load during the forced outage. Thus, the forced outage that
3		occurred during January 2022 does not affect the Company's decision to use January
4		2022 average fuel costs upon which to base its proposed base fuel rate in this case.
5		Thus, under all approaches, it is the prudent and most reasonable choice for a new base
6		fuel rate and is representative of historical and projected fuel costs.
7	Q.	WHEN DOES THE COMPANY REQUEST THAT THE PROPOSED NEW
8		BASE FUEL RATE BE PLACED INTO EFFECT?
9	A.	The Company requests that the proposed base fuel rate of 3.380 cents per kWh be
10		placed into effect with services rendered on or after the Company's first billing cycle
11		following the date of the Commission's order in this case.
12		V. <u>CONCLUSION</u>
13	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?
14	A.	Yes, it does.

VERIFICATION

The undersigned, Scott E. Bishop, being duly sworn, deposes and says he is the Regulatory Consultant Senior for Kentucky Power, that he has personal knowledge of the matters set forth in the foregoing testimony and the information contained therein is true and correct to the best of his information, knowledge, and belief after reasonable inquiry.

		Scott 6. Rushof Scott E. Bishop
Commonwealth of Kentucky)	Case No. 2023-00008
County of Boyd)	Case 140. 2023-00006

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Scott E. Bishop, on F. ebruary 5,2024

Marchy Michelle Colduele

My Commission Expires Www 5, 2027

Notary ID Number KYNP71841

MARILYN MICHELLE CALDWELL Notary Public Commonwealth of Kentucky Commission Number KYNP71841 My Commission Expires May 5, 2027