

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)	

DIRECT TESTIMONY OF
SCOTT E. BISHOP
ON BEHALF OF KENTUCKY POWER COMPANY

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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. BACKGROUND

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
10 University in 2004. I began my utility industry career with American Electric Power
11 Service Corporation (“AEPSC”) in October 1998 as a Cash Management Analyst with
12 responsibility for determining the corporation’s daily cash position. In 2000, I
13 transferred to the Trusts and Investments Department as an Investment Analyst. My
14 duties included staying abreast of pending legislation and litigation that could affect
15 AEP benefits and performing analysis and reporting for the corporate investment
16 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.

3 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:

Witness	Ordering Paragraph Item 6 Topic	Description
Kimberly K. Chilcote	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;
	b	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;
	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.
Clinton M. Stutler	N/A	Overview of the natural gas market during the Review Period; and
	a	The reasonableness of Kentucky Power's natural gas procurement practices during the Review Period.

Alex E. Vaughan	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;
	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	l	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.

12 **Q. PLEASE DESCRIBE THE PROCESS THE COMPANY USED IN REACHING
13 ITS RECOMMENDATION TO INCREASE ITS CURRENT BASE FUEL
14 RATE TO 3.380 CENTS PER KWH.**

15 A. Kentucky Power focused its review on historical fuel costs for the entire 24-month
16 Review Period that is the subject of this proceeding, as well as the Company's
17 forecasted cost of fuel for calendar years 2023, 2024, and 2025.

18 **Q. WHAT WERE THE COMPANY'S FUEL COSTS DURING THE TWO-YEAR
19 REVIEW PERIOD?**

20 A. **Table SEB-1** below provides the Company's monthly fuel costs and compares those
21 costs to the base fuel rate in effect during the subject month.

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

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

1 During the two-year Review Period, the cost of fuel fluctuated between a high
2 of 6.571 cents per kWh (September 2022) to a low of 2.477 cents per kWh (November
3 2020). This represents fluctuations from as high as 151.6% above the current rate to
4 as low as 5.2% below the current rate. In 23 of the 24 months of the Review Period,
5 the monthly fuel rate was more than the current base fuel rate of 2.612 cents per kWh.
6 Company Witnesses Vaughan, Stutler, and Chilcote provide further information on the
7 drivers of this volatility in fuel costs during the Review Period. Significant fluctuations
8 such as those experienced during the two-year Review Period increase the month-over-
9 month volatility in customers' bills and can create uncertainty for customers when
10 budgeting their monthly expenses—particularly residential customers.

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

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

18 A. The Company's projected fuel costs for calendar years 2023, 2024, and 2025 are
19 3.50294 cents per kWh, 3.43120 cents per kWh, and 3.53881 cents per kWh,
20 respectively. As reflected in **Table SEB-2** below, 2023 through 2025 fuel cost
21 projections are approximately 31.4% to 35.5% *higher* than the current base fuel rate of
22 2.612 cents per kWh.

23

Table SEB-2					
Fuel Cost and Sales Projections					
Year of Projection	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
Average			3.49098	2.612	0.87898

1 However, these projected costs are substantially *below* the average fuel cost during the
2 Review Period (4.111 cents per kWh). But, they are relatively in line with the median
3 fuel cost during the Review Period (3.437 cents per kWh).

4 **Q. IS IT REASONABLE TO LEAVE THE CURRENT BASE FUEL 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 2023 THROUGH 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 DOES THE COMPANY PROPOSE?**

15 A. The January 2022 average fuel cost (3.380 cents per kWh) was the closest to the
16 approximate median fuel cost (3.437 cents per kWh) during the Review Period. It also
17 was the Review Period month that was closest to the average (3.49098 cents per kWh)

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?**

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

19 Further, even if the Company's historical approach of choosing the closest
20 month to the two-year average were used, January 2022 would still represents the
21 month closest to the two-year average of 4.111, and that also does not contain any
22 forced outages. Thus, under all approaches, it is the prudent and most reasonable choice
23 for a new base fuel rate and is representative of historical and projected fuel costs.

1 **Q. WHEN DOES THE COMPANY REQUEST THAT THE PROPOSED NEW**
2 **BASE FUEL RATE BE PLACED INTO EFFECT?**

3 A. The Company requests that the proposed base fuel rate of 3.380 cents per kWh be
4 placed into effect with services rendered on or after the Company's first billing cycle
5 following the date of the Commission's order in this case.

6 **V. CONCLUSION**

7 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

8 A. Yes, it does.

