

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. 2025-00338
FROM NOVEMBER 1, 2022 THROUGH)
OCTOBER 31, 2024.)

DIRECT TESTIMONY OF
CLINTON M. STUTLER
ON BEHALF OF KENTUCKY POWER COMPANY

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I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.**

2 A. My name is Clinton M. Stutler. My business address is 1 Riverside Plaza, Columbus, Ohio
3 43215. I am employed by American Electric Power Service Corporation (“AEPSC”) as the
4 Director of Natural Gas Procurement. AEPSC, is a wholly owned subsidiary of American
5 Electric Power Company, Inc. (“AEP”). AEP is the parent company of Kentucky Power
6 Company (“Kentucky Power” or the “Company”).

II. BACKGROUND

7 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND
8 BUSINESS EXPERIENCES.**

9 A. I earned a Bachelor of Science in Business Administration degree, with a major in
10 Transportation & Logistics and Marketing, from the Ohio State University in 2002, and a
11 Master’s degree in Business Administration from Bowling Green State University in 2007.
12 I have 24 years of energy industry experience in fuel procurement, logistics,
13 marketing, scheduling, and transportation. My professional background began in 2002 as
14 a Scheduler with Marathon Petroleum Company. In 2008, I joined AEPSC in the Fuel,
15 Emissions, and Logistics organization as a Coal Buyer, with responsibilities for the
16 procurement of coal for Ohio Power Company. In 2014, I joined AEP Generation
17 Resources, with responsibilities for purchasing natural gas, coal, urea, and fuel oil, in
18 addition to marketing fly ash and flue gas desulfurization gypsum. In 2016, I accepted a

1 position in the regulated Commercial Operations organization as a Coal Buyer and became
2 responsible for the procurement of coal for Appalachian Power Company (“APCo”),
3 Kentucky Power, and Southwestern Electric Power Company (“SWEPCO”). On May 4,
4 2018, I was promoted to Manager of Natural Gas and Fuel Oil Procurement, becoming
5 responsible for the procurement and delivery of natural gas and fuel oil to AEP’s regulated
6 generating fleet. On February 3, 2024, I was promoted to Director of Natural Gas
7 Procurement.

8 **Q. WHAT ARE YOUR PRINCIPAL AREAS OF RESPONSIBILITY?**

9 A. I am responsible for the procurement and delivery of natural gas and fuel oil to AEP’s
10 regulated generating fleet, which includes regulated power plants owned and/or operated
11 by Kentucky Power and its affiliates.

12 **Q. HAVE YOU PREVIOUSLY TESTIFIED IN ANY REGULATORY
13 PROCEEDINGS?**

14 A. Yes. I have submitted testimony and testified before the Public Service Commission of
15 Kentucky on behalf of Kentucky Power, most recently in Case No. 2025-00257. I have
16 also submitted testimony and testified before the Public Service Commission of West
17 Virginia on behalf of APCo and Wheeling Power Company, and before the Oklahoma
18 Corporation Commission on behalf of Public Service Company of Oklahoma (“PSO”).
19 Furthermore, I have filed testimony before the Public Utility Commission of Texas and
20 before the Arkansas Public Service Commission on behalf of SWEPCO, and before the
21 State Corporation Commission of Virginia on behalf of APCo.

III. PURPOSE OF TESTIMONY

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

2 A. The purpose of my testimony is to address the following areas:

- 3 a) Provide an overview of the natural gas market during the Review Period;
- 4 b) Describe how the Big Sandy Plant is supplied with natural gas, the associated
- 5 procurement strategy, and the reasonableness of Kentucky Power's natural gas
- 6 procurement practices from November 1, 2022 through October 31, 2024 ("Review
- 7 Period").

IV. MARKET OVERVIEW

8 **Q. HAS THE NATURAL GAS MARKET BEEN PARTICULARLY VOLATILE IN**
9 **RECENT YEARS?**

10 A. Yes. As I discuss in detail below, the natural gas market has been quite volatile in recent
11 years. Specifically, since about 2020, natural gas prices have fallen and risen inconsistently
12 and unpredictably. Figure CMS-1 provides a visual representation of this volatility.

Figure CMS-1



1 **Q. IS SUCH PRICE VOLATILITY EXPECTED TO CONTINUE?**

2 A. Yes. Natural gas price volatility is expected to continue in the coming years due to factors
3 such as, but not limited to, increasing demand for electricity, increasing global demand for
4 liquefied natural gas (“LNG”), the increasing severity of winter storms, and potential
5 imbalances between domestic natural gas supply and demand.

6 **Q. WHAT ACTION HAS KENTUCKY POWER TAKEN TO MITIGATE NATURAL
7 GAS PRICE VOLATILITY?**

8 A. In early 2023, Kentucky Power began purchasing for the Big Sandy Plant specific
9 quantities of fixed-price natural gas supply, for specific forward months to mitigate spot
10 market natural gas price volatility. Such purchases provide price and supply surety and are
11 immune to spontaneous movement that may occur in the spot market.

12 **Q. BEFORE DESCRIBING THE RECENT MARKET VOLATILITY, IT MAY BE
13 HELPFUL TO UNDERSTAND SOME COMMON TERMS. CAN YOU EXPLAIN
14 THE MEANING OF “INJECTION SEASON” AND “WITHDRAWAL SEASON”
15 AND WHY THE ASSOCIATED STATISTICS ARE MEANINGFUL WITH
16 REGARD TO NATURAL GAS PRICES AND SUPPLY?**

17 A. Injection season typically occurs between the months of April and October, when excess
18 natural gas production is stored in preparation for the higher-demand winter months.
19 Correspondingly, withdrawal season typically occurs between the months of November
20 and March, when natural gas is withdrawn from storage to meet excess demand. Natural
21 gas storage is closely monitored by the market, as storage is the best gauge of the balance
22 between supply and demand. For example, if warmer than normal temperatures are
23 experienced in the months of January and February, natural gas inventory will be elevated

1 at the end of withdrawal season. Elevated inventory will limit injections during injection
2 season, creating excess natural gas supply in the market, and causing overall prices to
3 decrease.

4 **Q. PLEASE DESCRIBE THE NATURAL GAS MARKET IMMEDIATELY PRIOR
5 TO THE REVIEW PERIOD, AT THE BEGINNING OF CALENDAR YEAR 2022.**

6 A. “Unprecedented volatility” would best describe the natural gas market in calendar year
7 2022. There were 18 days in 2022 where the closing price of the NYMEX prompt month
8 contract shifted by more than 10%. This was the largest number of days for such a shift
9 since the NYMEX contract made its debut more than 30 years ago. In January 2022 and
10 February 2022, cold winter temperatures throughout the country resulted in natural gas
11 storage withdrawals that surpassed the five-year average level by 28%. At the same time,
12 demand for US LNG exports continued to increase. On February 24, 2022, Russia invaded
13 Ukraine, which added further instability to an already volatile energy market and put more
14 pressure on US LNG exports, particularly to Europe. In early March 2022, global LNG
15 prices spiked to nearly \$60 per MMBtu.

16 In April 2022, as the US natural gas market transitioned from withdrawal season to
17 injection season, natural gas inventory was about 17% below the five-year average level.
18 With storage much below average, weaker injections, and stagnant production, natural gas
19 prices began a steep upward climb. The May 2022 NYMEX contract settled at \$7.27 per
20 MMBtu, while the June 2022 NYMEX contract settled at \$8.91 per MMBtu. The last time
21 prompt month NYMEX contracts settled in this range was during calendar year 2008.
22 During the first week of June 2022, the July 2022 NYMEX was trading above \$9.50 per
23 MMBtu. Then, on June 8, 2022, there was an explosion and fire at the Freeport LNG

1 terminal. This facility exports the equivalent of 2 billion of cubic feet (“Bcf”) per day of
2 natural gas, which equates to approximately 2% of total domestic dry gas production. After
3 about a week, it was determined that due to the damage, the facility would be in an outage
4 until late 2022, which meant that 2 Bcf per day of natural gas would be backed into the
5 domestic market providing additional supply. This caused the July 2022 NYMEX contract
6 to retreat into the \$6 per MMBtu range, ultimately settling at \$6.55 per MMBtu.

7 As the market entered the peak summer months of July 2022 and August 2022,
8 natural gas production began to trend higher. In addition, despite the elevated prices,
9 natural gas demand from domestic power generators remained at record levels throughout
10 the summer. The August 2022 NYMEX contract settled at \$8.69 per MMBtu, while the
11 September 2022 NYMEX contract settled at \$9.35 per MMBtu. Injections to storage were
12 about 6% lower than the five-year average, which was not helpful considering total
13 domestic inventory was low at the outset. In the international market, global demand for
14 LNG was still very high, with record prices assessed above \$70 per MMBtu.

15 During the month of September 2022, storage injections started to become stronger.
16 The market began seeing weekly injections outpacing the five-year average, making the
17 total storage deficit smaller. This, in turn, caused natural gas forward market and spot
18 market prices to decrease. The October 2022 NYMEX contract settled at \$6.87 per
19 MMBtu, which was a decrease of about 27% from the prior month.

20 Strong storage injections, as well as record natural gas production, continued into
21 October 2022. By mid-October, there was a run of four consecutive triple-digit storage
22 injections, which is a streak that had only been observed twice in the last decade. By the
23 end of the month, the storage deficit to the five-year average had shrunk to under 4%. This

1 is quite an accomplishment considering that injection season began at a 17% deficit to the
2 five-year average.

3 **Q. PLEASE DESCRIBE THE NATURAL GAS MARKET AT THE BEGINNING OF**
4 **THE REVIEW PERIOD.**

5 A. In early November 2022, with unseasonably warm weather and low demand, spot market
6 natural gas prices started to collapse. During the first two weeks of the month, the Columbia
7 Gas, App. market index, which is the applicable index for the Big Sandy Plant, averaged a
8 daily settlement price of \$2.73 per MMBtu. In the international market, demand for LNG
9 started to wane and prices retreated below \$14 per MMBtu. In the second half of the month,
10 cold weather returned which caused spot prices to rebound to over \$5 per MMBtu.
11 However, the important news was that domestic storage levels had increased at such a pace
12 that total inventory was now consistent with the five-year average. The December 2022
13 NYMEX contract settled at \$6.71 per MMBtu.

14 There were two significant developments during the month of December 2022. The
15 first was Winter Storm Elliott, which wreaked havoc in the PJM service territory. While
16 demand was very high, spot market natural gas prices in the supply-rich Appalachian Basin
17 were much lower than expected. During the storm, the Columbia Gas, App. market index
18 settled between \$6.20 and \$7.43 per MMBtu.

19 The second significant development was the situation regarding the forward natural
20 gas market. Despite the problems that the cold weather associated with Winter Storm
21 Elliott was causing, the forward market was simultaneously collapsing. The 11- to 15-day
22 weather forecast predicted above normal temperatures and the market was reacting. In the
23 final days of calendar year 2022, the Columbia Gas, App. spot price settled just above the

1 \$3 per MMBtu mark. The January 2023 NYMEX contract settled at \$4.71 per MMBtu,
2 which was the lowest monthly settlement in almost a year.

3 As the market moved into January 2023, the mild winter weather continued to put
4 downward pressure on natural gas prices. In fact, in the middle of the month, rather than a
5 small storage withdrawal, there was a small storage injection reported. This was the first
6 January storage injection on record, according to EIA data going back to 1994. Over the
7 last 30 years, the US has only had a weekly injection five times during the months of
8 December, January, and February, with the last injection occurring in December 2017.
9 From an international perspective, Europe was experiencing the same type of weather
10 conditions. According to data from Gas Infrastructure Europe, natural gas storage levels in
11 Europe were 80% full in mid-January. This compares to levels closer to 45%, experienced
12 the year prior. The February 2023 NYMEX contract settled at \$3.11 per MMBtu, which
13 was a 19-month low.

14 Above-normal temperatures continued to put downward pressure on natural gas
15 prices into February 2023. As the most typically severe winter months (December through
16 February) were coming to an end, it became apparent that storage would end withdrawal
17 season at a significant surplus to the five-year average. In fact, if production were to remain
18 strong, by the next withdrawal season, total storage would be expected to match or surpass
19 historical records. The March 2023 NYMEX contract settled at \$2.45 per MMBtu, with
20 the April 2023 NYMEX contract settling at \$1.99 per MMBtu. This was the first time that
21 the prompt month contract settled below \$2.00 per MMBtu since August 2020.

22 At the start of the 2023 injection season, natural gas injections into storage were
23 very strong. During the first two weeks of April 2023, total inventory increased by 100

1 Bcf, exceeding the five-year average injection for the corresponding time period of 69 Bcf.
2 Strong injections continued into May 2023, and by early June 2023, total storage injections
3 were about 9% higher than the five-year average. Strong production and healthy storage
4 continued to weigh heavily on market prices as the May 2023 and June 2023 prompt month
5 NYMEX contracts settled at \$2.12 per MMBtu and \$2.18 per MMBtu, respectively.

6 During the summer months, excessive heat was experienced across Texas and the
7 Midcontinent Region. The associated cooling demand caused natural gas-fired power
8 burns to set daily records, at more than 50 Bcf. The hot weather caused a slowdown in
9 storage injections and moderate increases in natural gas pricing. By the end of August
10 2023, total storage injections were now just slightly below the five-year average. The
11 prompt month NYMEX contracts for the months of July 2023, August 2023, and
12 September 2023 settled in the \$2.50 to \$2.60 per MMBtu range.

13 The stretch of below-average storage injections continued into the fall shoulder
14 season. By mid-September 2023 the market realized the eleventh consecutive
15 below-average injection, which caused the total inventory surplus to retreat to 7% above
16 average. From a natural gas production standpoint, production was robust throughout the
17 year, which helped to offset the higher consumption, and to keep total storage at a surplus
18 to the average.

19 While prompt prices remained relatively low, the forward market was stronger. Due
20 to the winter risk associated with the months of January and February, in early October
21 2023 the forward NYMEX contract for the months of January 2024 and February 2024
22 was trading just below \$4.00 per MMBtu. As injection season was coming to an end, total
23 storage was near 3.8 trillion cubic feet (“Tcf”), which was about 5% higher than average.

1 Even with the bearish sentiment in the market, due to high storage and strong production,
2 the November 2023 NYMEX contract settled at \$3.16 per MMBtu, which was the first
3 prompt month settlement above \$3.00 per MMBtu since the very beginning of the year.

4 However, any potential bull run regarding natural gas prices was quickly dismissed
5 as the market entered November 2023. Typically, in the month of November, the market
6 will see a net storage withdrawal of 41 Bcf. In November 2023, the market saw a net
7 storage *injection* of 57 Bcf. The December 2023 NYMEX contract ultimately settled at
8 \$2.71 per MMBtu. Weather forecasts continued to warm up, causing lower natural gas
9 demand, and corresponding lower natural gas prices. As the days rolled forward, the market
10 continued losing heating degree days in the month of December 2023. In fact, by the time
11 December 2023 came to a close, it was recorded as the third warmest December since 1950.
12 At the same time, the market was witnessing record high natural gas production. These
13 events, coupled with above average natural gas storage, removed much of the winter
14 premium from the forward market. The January 2024 NYMEX contract settled at \$2.62
15 per MMBtu.

16 **Q. DID THE MARKET WEAKNESS CONTINUE INTO 2024?**

17 A. Yes, with one exception. By early January 2024, withdrawals from natural gas storage
18 totaled 289 Bcf, which was 28% below the five-year average. However, the weather
19 forecast was shifting much cooler, with the storage surplus expected to soon narrow by
20 triple digits due to excessive demand. Between January 13, 2024, and January 16, 2024,
21 spot market pricing applicable for the Big Sandy Plant increased to nearly \$14 per MMBtu.
22 Total natural gas demand during this period reached an all-time high (greater than both
23 Winter Storm Uri and Winter Storm Elliott). At the same time, due to well freeze-offs and

1 other weather-related problems, natural gas production decreased by more than 10%. The
2 storage withdrawal during the winter storm exceeded 300 Bcf, which was only the third
3 time in history the withdrawal has met that benchmark. Throughout calendar year 2023,
4 Kentucky Power had made multiple fixed-price, physical natural gas purchases for January
5 2024 delivery, thus the Company's customers were somewhat protected from the volatile
6 spot market prices.

7 Subsequent to the winter storm, the natural gas storage surplus began to erode, as
8 total inventory was moving toward average levels. However, the weather forecast was
9 projecting plenty of warmth, putting a lid on any potential bull market run. The February
10 2024 NYMEX contract settled at \$2.49 per MMBtu. By the time that February 2024 was
11 over, it was recorded as the second warmest February since 1950. With winter over, and
12 natural gas storage and production as strong as ever, the March 2024 NYMEX contract
13 settled at \$1.62 per MMBtu, while the April 2024 NYMEX contract settled at \$1.58 per
14 MMBtu. Because of the steep decline in pricing, the market clearly oversupplied, and the
15 lack of opportunity to reverse course, producers began to announce production cuts.

16 During the month of April 2024, the production cuts started to become realized, as
17 production decreased by approximately 5% from the 2023 peak. Nevertheless, injections
18 into storage continued to outpace the five-year average. Forward pricing remained
19 extremely depressed with the May 2024 NYMEX contract settling at \$1.61 per MMBtu.

20 In May 2024, the market started to see consecutive below-average storage
21 injections. The lower storage injections began to close the gap between actual and average
22 storage levels. The June 2024 NYMEX contract settled at \$2.49 per MMBtu, sharply
23 higher than the previous three months. By the beginning of June 2024, storage injections

1 totaled 536 Bcf, or about 8% lower than the five-year average. Weak storage injections
2 were expected to continue through the summer, supported by warming temperatures, rising
3 gas-fired power demand and the eventual end to LNG terminal maintenance, which limited
4 feedgas demand for much of the spring.

5 With the continued warm weather, the July 2024 NYMEX contract settled at \$2.63
6 per MMBtu. Into July 2024, the market continued seeing below-average injections, which
7 limited inventory growth. Storage injections lagged the five-year average by 14% by the
8 middle of the month. It was reported that June 2024 and July 2024 were the warmest in the
9 last 130 years.

10 With stronger pricing, the market began seeing additional natural gas production
11 return. With production returning, and LNG feedgas demand waning, natural gas forward
12 pricing returned to the bearish side. The August 2024 NYMEX contract settled at \$1.91
13 per MMBtu, with the September 2024 NYMEX contract settling at \$1.93 per MMBtu.

14 By mid-September 2024, natural gas injections totaled 1.09 Tcf, which was 22%
15 below average. For the balance of the month, storage injections continued to be on the low
16 side, further dwindling the storage surplus. By the end of September 2024, weather
17 forecasts were predicting lingering hot weather into October 2024, which would continue
18 to support strong natural gas-fired power demand. The October 2024 NYMEX contract
19 settled at \$2.59 per MMBtu.

20 By mid-October 2024, it was recognized that if storage injections continued to lag
21 average levels by the same margin for the balance of the month, total inventory would
22 decrease to less than 3% above average. By the end of the month, October 2024 was
23 recognized as the third warmest October in the US in the last 60 years. However, warm

1 October weather is received differently than warm July or August weather. Storage
2 injections were stronger during the second half of the month, exceeding average injections
3 for the corresponding period.

V. NATURAL GAS PROCUREMENT

4 **Q. PLEASE DESCRIBE HOW THE BIG SANDY PLANT IS SUPPLIED WITH
5 NATURAL GAS.**

6 A. Natural gas procurement for the Big Sandy Plant is based on two components: supply and
7 transportation. Natural gas *supply* agreements provide the commodity used to fuel the
8 power plant. Natural gas pipeline *transportation* agreements secure the necessary means
9 to transfer the natural gas supply from the source to the plant.

10 The Big Sandy Plant utilizes a firm natural gas transportation agreement to move
11 purchased natural gas supply from applicable receipt points. From a natural gas supply
12 perspective, the Big Sandy Plant utilizes both baseload and spot market natural gas supply
13 contracts. In order to mitigate spot market price volatility, forward-month, fixed-price
14 natural gas supply is secured for the Big Sandy Plant. This practice is also called “hedging”
15 which I explain in more detail below. Kentucky Power utilizes the spot natural gas market
16 to balance daily positions, making additional purchases and sales as necessary.

17 **Q. WHAT IS HEDGING?**

18 A. Hedging is the practice of entering into transactions for the purpose of limiting exposure
19 to one or more risks in a particular market. Kentucky Power’s energy costs can be hedged
20 by purchasing fixed-cost fuel for owned generation assets or by buying other energy
21 products that fix the cost of the megawatt hours consumed. In this way, hedging brings
22 greater energy cost certainty in advance of energy consumption.

1 **Q. DID KENTUCKY POWER ENGAGE IN HEDGING ENERGY COSTS FOR ITS
2 CUSTOMERS DURING THE REVIEW PERIOD?**

3 A. Yes. In 2023, Kentucky Power began a hedging program to address the particularly volatile
4 gas pricing I previously describe. Under this program, Kentucky Power hedged energy
5 costs using physical sources of energy, which includes natural gas. As described earlier, in
6 order to mitigate spot market natural gas price volatility, Kentucky Power engages in
7 physical natural gas hedging by securing forward-month, fixed-price natural gas supply for
8 the Big Sandy Plant. These hedging purchases are made via a competitive request for
9 proposal (“RFP”) process. AEPSC, on behalf of Kentucky Power, issues RFPs to obtain
10 specific quantities of baseload natural gas supply in specific forward months. Transactions
11 are completed with the most reliable, least cost offers.

12 **Q. HOW DOES HEDGING NATURAL GAS BENEFIT CUSTOMERS?**

13 A. As explained earlier, natural gas prices have been very volatile in the last several years.
14 Kentucky Power’s natural gas hedging strategy allows Kentucky Power to bring more fuel
15 cost certainty and stability to customers, with the intent of helping to levelize fuel costs.
16 While I discuss some of the risks inherent in any hedging strategy later in my Direct
17 Testimony, Kentucky Power determined that providing more fuel cost certainty to
18 customers through hedging outweighs those risks, to the benefit of customers.

19 **Q. PLEASE DESCRIBE KENTUCKY POWER’S COMPREHENSIVE ENERGY
20 HEDGING PROGRAM.**

21 A. Kentucky Power forecasts weather-normalized customer load by month over a rolling
22 36-month period and compares available fixed-cost resources in each month to that load.
23 At predetermined milestones of 36 months, 18 months, and two to six months before flow,

1 Kentucky Power increases the level of fixed-cost physical hedges to cover “target hedge
2 percentages” of the weather-normalized customer load. These target hedge percentages
3 increase over time to result in a larger portion of the cost of customer load becoming fixed.
4 At each milestone, the lowest cost available alternative is chosen for procurement. Through
5 this “layering” of resources beginning 36 months in advance of a flow month for energy,
6 Kentucky Power also diversifies the market risk of procuring fixed-price fuel over time.

7 **Q. FOR THE BIG SANDY PLANT, WHAT IS THE MAXIMUM HEDGE QUANTITY
8 THAT KENTUCKY POWER MAY PURCHASE FOR A SPECIFIC FORWARD
9 MONTH AND HOW IS SUCH QUANTITY DETERMINED?**

10 A. The Big Sandy Plant is capable of consuming 72,000 million British thermal units
11 (“MMBtu”) per day of natural gas supply. However, such consumption is variable and is
12 dependent on real-time market conditions. In general, when the Big Sandy Plant is online,
13 consumption will range between 30,000 MMBtu and 60,000 MMBtu, which is dependent
14 on real-time electricity demand. While it is impossible to accurately predict natural gas
15 consumption one day in advance, it is exponentially impossible to predict natural gas
16 consumption months or years in advance. As a conservative, general rule, Kentucky Power
17 limits forward natural gas physical hedge purchases to 32,000 MMBtu per day. However,
18 in peak months where Kentucky Power has been projected to have an energy need,
19 purchases of up to 43,000 MMBtu have been made.

20 There are some rare instances where Kentucky Power may purchase even greater
21 quantities, but such events are the exception. For example, in advance of January 2024,
22 when temperatures were expected to be significantly below normal, Kentucky Power
23 purchased a total of 54,000 MMBtu per day. The weighted average of such supply equaled

1 \$2.805 per MMBtu. As referenced in Section IV, the Columbia Gas, App. market index,
2 which is specific to the Big Sandy Plant, settled near \$14 per MMBtu for four consecutive
3 days in January 2024. Because Kentucky Power pursued fixed-price, physical hedges (most
4 of which were done months in advance) customers saved approximately \$2.4 million in
5 fuel costs during just this four-day period.

6 **Q. WHAT ARE THE RISKS ASSOCIATED WITH PHYSICALLY HEDGING
7 NATURAL GAS SUPPLY MONTHS IN ADVANCE OF FLOW?**

8 A. The primary risk is related to the uncertainty of demand. As illustrated earlier, Kentucky
9 Power has been very thoughtful in its approach with regard to the timing and quantity
10 related to forward month baseload purchases. However, forced and maintenance outages
11 do occur, and planned outages change. In addition, changes in market conditions also
12 impact the dispatch of the Big Sandy Plant, causing deviations in expected versus actual
13 consumption. These risks are outweighed, however, by the impact of not pursuing fixed-
14 price, forward-month natural gas supply and, as a result, being fully exposed to spot market
15 price volatility.

16 **Q. DOES PURCHASING FIXED-PRICE, FORWARD-MONTH BASELOAD
17 NATURAL GAS SUPPLY ALWAYS RESULT IN LOWER FUEL COSTS?**

18 A. No, not always. But, the intent of Kentucky Power's hedging strategy is to limit exposure
19 to spot market price volatility, and to spread market risk over time. At liquidation,
20 sometimes the forward month purchases will be the least cost alternative, and sometimes
21 the settled spot market price will be the least cost alternative. In the current market
22 environment, physical natural gas hedging is essential in providing price stability and
23 supply surety.

1 An example was provided above, where the purchase of fixed-priced,
2 forward-month natural gas supply proved to be a substantial benefit to customers during a
3 four-day period in January 2024. As calendar year 2024 progressed, the forward market
4 was in continual decline (from one month to the next), and thus purchases made many
5 months in advance were more expensive than spot market settlement pricing. Such
6 purchases were either consumed at the Big Sandy Plant, or if the plant was not operating,
7 the purchases were sold into the spot market at applicable pricing.

8 **Q. HOW IS THE DEVIATION BETWEEN PHYSICAL NATURAL GAS
9 PURCHASED AND ACTUAL NATURAL GAS CONSUMED MANAGED?**

10 A. There will always be a difference between natural gas purchased and natural gas consumed.
11 The goal is to minimize the difference as much as possible, with such difference reverting
12 to an Operational Balancing Account (“OBA”). An OBA is meant to account for small
13 differences and is not to be used as storage or a more elaborate balancing tool. For example,
14 assume that the OBA is flat, or zero. For a particular month, Kentucky Power has purchased
15 32,000 MMBtu per day of forward baseload natural gas supply. On day one, the Big Sandy
16 Plant consumed 34,000 MMBtu, creating an OBA deficit of 2,000 MMBtu. On day two,
17 the Big Sandy Plant consumes 29,000 MMBtu, causing the OBA to now have a surplus of
18 1,000 MMBtu. On day three through day five, the Big Sandy Plant is required to perform
19 a maintenance outage. If the pipeline is unwilling to allow Kentucky Power to add 96,000
20 MMBtu to its OBA, which would often be the case, the only other alternative is to sell the
21 natural gas supply into the spot market.

1 **Q. DO MOST PIPELINES OPERATE IN THIS MANNER, AND ARE THERE**
2 **DIFFERENT METHODS OF HANDLING LONG AND SHORT IMBALANCES?**

3 A. For Columbia Gas Transmission, which is the pipeline that serves the Big Sandy Plant, any
4 balance on the OBA carries forward month-to-month. Other pipelines may have provisions
5 in their tariffs that require daily or monthly cashouts. A cashout occurs when the excess
6 quantity is sold to the pipeline, or the deficit is purchased from the pipeline (daily or
7 monthly basis). There also are provisions in the pipeline tariff or statement of operating
8 conditions that specify how the sale and purchase price is derived.

VI. CONCLUSION

9 **Q. WERE KENTUCKY POWER'S NATURAL GAS PROCUREMENT PRACTICES**
10 **DURING THE REVIEW PERIOD REASONABLE?**

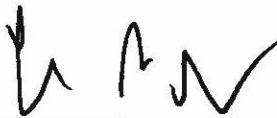
11 A. Yes. Kentucky Power manages its natural gas procurement to appropriately mitigate
12 market volatility and to provide a reliable supply of natural gas at the lowest reasonable
13 cost.

14 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

15 A. Yes, it does.

VERIFICATION

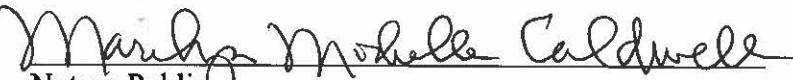
The undersigned, Clinton M. Stutler, being duly sworn, deposes and says he is the Director of Natural Gas Procurement for American Electric Power Service Corporation, that he has personal knowledge of the matters set forth in the foregoing testimony and the information contained therein is true and correct to the best of his information, knowledge, and belief after reasonable inquiry.



Clinton M. Stutler

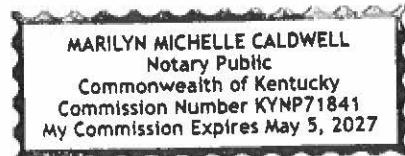
Commonwealth of Kentucky)
Case No. 2025-00338
County of Boyd)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Clinton M. Stutler, on January 19, 2026.



Notary Public

My Commission Expires May 5, 2027



Notary ID Number KYNP71841