

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Electronic Application Of Kentucky Power Company)
For (1) An Order Approving The Terms And)
Conditions Of The Bright Mountain Power Purchase)
Agreement Between The Company And Avangrid)
Renewables, LLC; (2) Authorization To Enter Into)
The Agreement; (3) Recovery Of Costs Through)
Tariff P.P.A.; (4) Approval Of Accounting Practices)
To Establish A Regulatory Asset; And (5) All Other)
Required Approvals And Relief)

Case No. 2024-00243

REBUTTAL TESTIMONY OF
NICOLE M. COON
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 Nicole M. Coon. I am employed by American Electric Power Service
3 Corporation (“AEPSC”) as a Regulatory Consultant Principal. My business address is
4 1 Riverside Plaza, Columbus, Ohio 43215. AEPSC is a wholly-owned subsidiary of
5 American Electric Power Company, Inc. (“AEP”), the parent Company of Kentucky
6 Power Company (the “Company” or “Kentucky Power”).

7 **Q. ARE YOU THE SAME NICOLE M. COON THAT PROVIDED PRE-FILED**
8 **DIRECT TESTIMONY IN THIS PROCEEDING?**

9 A. Yes.

II. PURPOSE OF REBUTTAL TESTIMONY

10 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS**
11 **PROCEEDING?**

12 A. The purpose of my testimony is primarily to respond to the assumptions and claims in
13 AG-KIUC Witness Wellborn’s Direct Testimony regarding energy and REC valuation.
14 I will also present the economic analysis with more realistic scenarios than those
15 presented by Ms. Wellborn. Finally, I will address AG-KIUC Witness Kollen’s
16 recommendations on ratemaking for the costs and revenues associated with the REPA.

1 **Q. ARE YOU SPONSORING ANY WORKPAPERS AS PART OF YOUR**
2 **REBUTTAL TESTIMONY?**

3 A. Yes. I am sponsoring the following workpapers:

- 4 • WP-NMC-1 Bright Mountain 8760 On and Off Peak analysis
- 5 • Confidential WP-NMC-2 Economic Analysis using On and Off peak
- 6 • Confidential WP-NMC-3 REC Chart Comparison Backup Detail
- 7 • Confidential WP-NMC-4 Sensitivity Economic Analysis: 2024
8 Fundamentals

III. FORECAST VALUATION

9 **Q. PLEASE ADDRESS THE CLAIMS MADE ON PAGES 7 AND 8 OF THE**
10 **TESTIMONY OF AG-KIUC WITNESS WELLBORN THAT THE**
11 **COMPANY’S ENERGY VALUATION METHOD IS “AN OVER-**
12 **SIMPLIFICATION” AND “NOT ADEQUATE FOR ASSESSING THE VALUE**
13 **OF THE REPA”.**

14 A. Ms. Wellborn’s claims regarding the Company’s energy valuation is not supported by
15 the evidence in this case. Ms. Wellborn claims that the use of an on-peak energy value
16 is not sufficient because it does not fully represent the load profile of a solar asset
17 because it assigns too much value to off-peak hours. However, Ms. Wellborn does not
18 provide an analysis that looks at on and off-peak energy values to provide evidence that
19 using on-peak is not sufficient nor adequate.

1 **Q. WHAT WAS THE BASIS FOR USING ON-PEAK PRICING IN THE**
2 **ECONOMIC ANALYSIS PROVIDED IN YOUR DIRECT TESTIMONY?**

3 A. Kentucky Power utilized on-peak pricing for its economic analysis because the Bright
4 Mountain Project will operate primarily during PJM on-peak hours. Because the sun
5 shines during the hours of the day considered to be on-peak (7 AM to 11 PM), the only
6 question is whether the day in question is a weekend or NERC holiday, which are
7 considered off-peak. While the facility will generate during off-peak hours, the
8 revenue produced during off-peak hours does not materially impact the calculation of
9 NPV for the Project. To further support this, Bright Mountain solar has production
10 during on-peak hours 69% of the time during the year. Using a weighted 69% on-peak
11 pricing and 31% off-peak pricing with the 2023 Fundamental energy prices, this leads
12 to a difference of less than \$765,000 on a NPV basis. Ms. Wellborn and Mr. Kollen
13 agree this would be an immaterial amount as demonstrated by their statement that the
14 Company's NPV value of capacity benefits are, "relatively small",¹ when those benefits
15 were values at over \$2 million.

16 **Q. MS. WELLBORN USES A SCENARIO WHERE RECS ARE VALUED AT**
17 **\$5/MWH.² IS THE BASIS FOR THIS ASSUMPTION VALID?**

18 A. No. Ms. Wellborn stated that she used this scenario because the Company could use
19 Tariff R.P.O. Option A as a backstop for REC pricing.³ This is not a true statement.

¹ Wellborn Direct at 6.

² Wellborn Direct at 12.

³ Wellborn Direct at 10.

1 The Company already clarified that these RECs would not be used for Tariff R.P.O.
2 Option A, as they are a different product.⁴

3 **Q. IS MS. WELLBORN'S SCENARIO OF \$0/MWH FOR A REC REALISTIC**
4 **BASED ON THE CURRENT AND HISTORIC PJM REC MARKET?**

5 A. No, for several reasons. First, the PJM REC market is liquid through 2030. That means
6 that people are buying RECs today that will be produced six years from now. This
7 liquid market would include the first 4 years of the REPA contract. Second, RECs
8 haven't traded at or near \$0/MWh since at least 2009.⁵ Third, while more solar could
9 come online, as Ms. Wellborn states on page 8 of her testimony, the reality is that only
10 approximately 17% of renewable projects that are currently in the PJM queue are
11 expected to go in service.⁶ The projects that do make it to completion are not just slated
12 to fulfill electric utilities needs either. Tech companies and corporations (commonly
13 referred to as "corporate buyers") also have sustainability goals and are contracting for
14 the renewable energy, putting more strain on the RPS REC market. In a recent 12-
15 month period ended February 2024, US-based companies contracted for 17 gigawatts
16 of renewable energy.⁷ In addition, S&P recently published their 2024 Q3 REC forecast
17 for the Pennsylvania market with values ranging from \$17.46 to \$55.23 during the time
18 of the REPA. This valuation is in line with, or in some years above, the Company's
19 internal REC forecast. Finally, solar RECs that were generated in Kentucky and then

⁴ See the Company's response to AG-KIUC 2-10, subparts a,b,d,e and f.

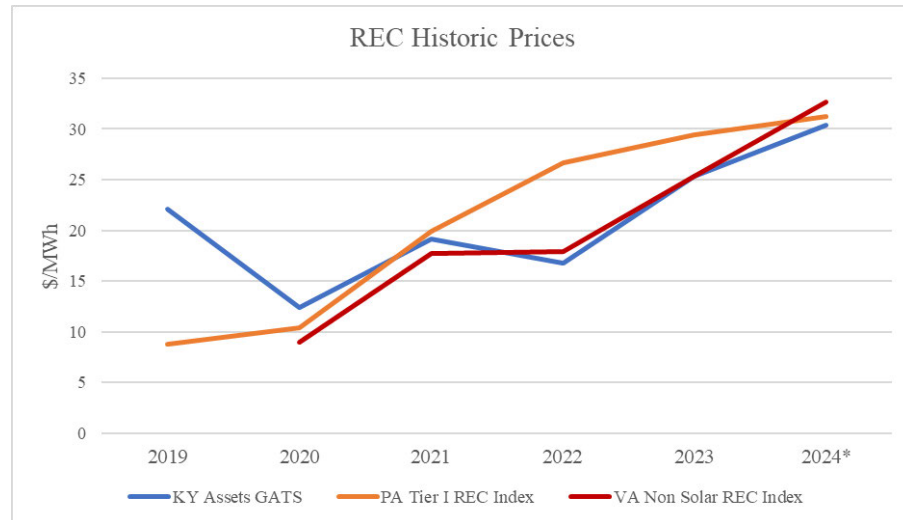
⁵ 2024 Quarterly State of the Market Report for PJM: January through September, Section 8, page 472.
https://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2024.shtml

⁶ 2024 Quarterly State of the Market Report for PJM: January through September, Section 12, page 713.

⁷ <https://www.spglobal.com/market-intelligence/en/news-insights/research/tech-companies-pace-us-corporate-renewable-procurement-as-volume-nears-75-gw>

1 sold have increased in average price and follow a similar increasing price trend as the
 2 Virginia and Pennsylvania markets as show in Figure NMC-R1.⁸

Figure NMC-R1



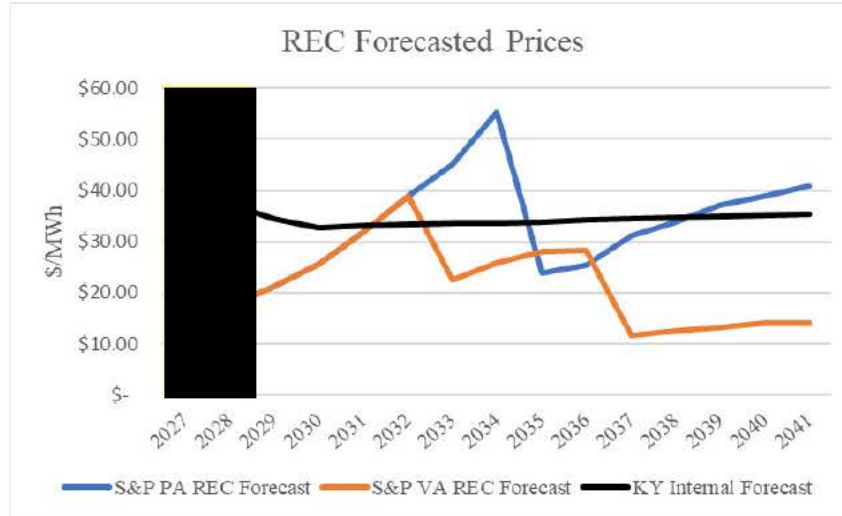
3 **Q. WHAT WOULD BE A MORE REALISTIC “LOW REC VALUE” SCENARIO**
 4 **TO USE?**

5 A. The Company expects to sell the RECs into the Pennsylvania (PA) or Virginia (VA)
 6 REC markets.⁹ As I mentioned earlier in testimony, the PA market forecast from S&P
 7 is in-line with, or higher, than the Company’s internal forecast. However, the VA
 8 market forecast from S&P is lower than the Company’s internal forecast. Figure NMC-
 9 R2 shows a comparison of the prices for the S&P forecast of the PA market, VA market,
 10 and the Company’s 2023 internal forecast.

⁸ Data for 2024 is through the most recent month at the time data was pulled. See the Company’s response to AG-KIUC 2-15 for the source data.

⁹ See the Company’s response to AG-KIUC 1-15, subpart d.

Figure NMC-R2



1 The Company believes using the VA forecast, as it is currently the lowest of the three
 2 forecasts presented, in conjunction with the known, settled prices through 2030, would
 3 be a more appropriate low scenario than \$0/MWh or \$5/MWh as presented by Ms.
 4 Wellborn.¹⁰ These forecasts are also third-party derived which help add validity to the
 5 Company's forecast.

IV. SENSITIVITY ANALYSIS

6 **Q. WITNESS WELLBORN PRESENTS VARIOUS SENSITIVITIES FOR HER**
 7 **ECONOMIC ANALYSIS ON PAGE 12 OF TESTIMONY. PLEASE**
 8 **SUMMARIZE HER SENSITIVITIES AND THE RESULTS PRESENTED.**

9 A. AG-KIUC Witness Wellborn performs a sensitivity analysis where energy prices are
 10 either 20% lower than the Company's 2023 Fundamentals, equal to the Company's, or
 11 20% higher. She also uses four scenarios for REC pricing, \$0/MWh, \$5/MWh, the

¹⁰ Wellborn Direct at 12.

1 Company's 2023 forecast, and the Virginia Alternative Compliance payment curve.
2 Out of the twelve scenarios presented, only 2 are positive.¹¹

3 **Q. PLEASE COMMENT ON THE SENSITIVITIES USED BY MS. WELLBORN.**

4 A. The use of 20% lower and higher energy prices is arbitrary, and Ms. Wellborn provides
5 no reasoning for the selection of 20%. As described earlier in my testimony, Ms.
6 Wellborn's use of a \$0/MWh for RECs is not supported by historic prices and is
7 unfounded. The use of \$5/MWh for RECs, based off her assumption that they will be
8 used to fulfill Tariff R.P.O Option A, is also incorrect as stated earlier and in discovery.
9 I do agree, however, that using the ACP from Virginia is an appropriate high REC case.

10 **Q. IN RESPONSE TO MS. WELLBON'S SENSITIVITY ANALYSIS, DID YOU**
11 **UPDATE YOUR ECONOMIC ANALYSIS?**

12 A. Yes. During the time of preparing the Company's rebuttal case, AEP released their
13 updated 2024 Fundamentals and REC forecast. AEP updates their Fundamentals on a
14 yearly basis for use by AEPSC and AEP operating companies.¹² In conjunction with
15 the Fundamentals release, the REC forecast is also updated. The updates to the forecasts
16 help provide a more accurate picture of the benefits of the REPA. With these updated
17 Fundamentals and forecasts, I ran sensitivities based on the low, base, and high energy
18 fundamentals published. The analysis considers 3 distinct REC value cases:

19 • **Low REC value:** this is the 2024 Q3 S&P Virginia REC forecast with the exception
20 that the years 2027-2030 have the known, settled prices from broker quotes as that
21 is what the market is currently paying for RECs.

¹¹ Wellborn Direct at 13.

¹² Description of how the Fundamentals are derived is provided in the Company's response to KPSC 1-7.

- 1 • **Base REC value:** this case uses the updated 2024 REC forecast compiled by the
2 Company.¹³
- 3 • **High REC value:** this case uses the ACP for Phase I utilities in Virginia. This is
4 the same high case that Ms. Wellborn uses in her Direct Testimony.¹⁴

5 The Company felt it was important to present the updated fundamentals as to have
6 updated assumptions around the load growth that is expected in PJM and the impact
7 that will have on the expected price for energy.

8 **Q. WHAT WERE THE RESULTS OF YOUR SCENARIO ANALYSIS?**

9 A. Table NMC-R1 below summarizes the calculated NPVs. In 6 out of the 9 sensitivities
10 presented, the NPV improved from the as filed NPV, with 4 of those sensitivities being
11 positive. In one other sensitivity, the NPV was in line with what I initially calculated
12 in my Direct Testimony. This confirms the Company's original NPV was reasonable.

Table NMC-R1

**Sensitivity Analysis - 2024 Fundamentals
(Cost) / Benefit NPV**

| | | REC | | |
|--------------------|------|---------|---------|---------|
| | | Low | Base | High |
| <i>\$ millions</i> | | | | |
| Energy | Low | \$ (40) | \$ (32) | \$ (15) |
| | Base | \$ (13) | \$ (5) | \$ 12 |
| | High | \$ 19 | \$ 28 | \$ 44 |

¹³ Description of how the internal REC forecast is derived is provided in the Company's response to KPSC 1-9.

¹⁴ Wellborn Direct at 12.

1 **Q. PLEASE SUMMARIZE YOUR RESPONSE TO MS. WELLBORN'S**
2 **SENSITIVITY ANALYSIS.**

3 A. The Company recognizes that forecasts can vary between parties and that they are a
4 snapshot in time and depending which forecast is utilized can produce varying results.
5 Taking all the scenarios performed by myself and Ms. Wellborn, while some of the
6 NPVs produce negative results, that should not be the sole determinant in a decision to
7 approve or deny this REPA; instead, as described in the Company's direct case and
8 Witness Wolfram's rebuttal testimony, the Commission should also consider that the
9 REPA provides a physical hedge against fuel prices, economic benefits for the
10 Commonwealth and a hedge against environmental compliance risks, while fulfilling a
11 portion of the Company's capacity and energy needs identified in the 2022 IRP.
12 Additionally, Company Witness Wolfram describes in his Direct Testimony, the
13 statutory and regulatory requirements by which the REPA should be evaluated and
14 approved.

V. PROPOSED RATEMAKING

15 **Q. AG-KIUC WITNESS KOLLEN CLAIMS THE COMPANY DID NOT**
16 **SPECIFICALLY ADDRESS HOW COSTS AND BENEFITS OF THE REPA**
17 **WOULD BE ACCOUNTED FOR. IS THIS ACCURATE?**

18 A. No. On page 6 of my Direct Testimony, the Company proposes all non-energy benefits
19 (avoided capacity and REC revenues) and costs be flowed through Tariff P.P.A. This
20 was further confirmed in response to AG-KIUC 2-13. To further clarify the issue of
21 capacity benefits, they will either manifest as an avoided cost, most likely of a capacity
22 purchase, or an incremental sale of capacity length. In the instance where the Bright

1 Mountain capacity allows the Company to avoid having to make market capacity
2 purchases, the benefit would flow through Tariff P.P.A. Because there would be less
3 market purchases of capacity due to the Bright Mountain REPA, less capacity purchase
4 costs would need to be recovered via Tariff P.P.A and, as such, there would be nothing
5 to credit through Tariff P.P.A. If the inclusion of the Bright Mountain capacity in the
6 Company's FRR plan were to result in an incremental sale of capacity, the revenues
7 from that sale would flow back to customers through the Company's System Sales
8 Clause mechanism.

9 The Company agrees with Mr. Kollen that the avoided capacity and REC
10 revenue should be flowed through Tariff P.P.A., but disagrees with his statement that
11 RECs will be used to fulfill obligations under Tariff R.P.O Option A, as these RECs
12 will not be used for Option A of the Tariff.

VI. CONCLUSION

13 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

14 **A.** Yes, it does.

VERIFICATION

The undersigned, Nicole M. Coon, being duly sworn, deposes and says she is a Regulatory Consultant Principal for American Electric Power Service Corporation, that she 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 her information, knowledge, and belief after reasonable inquiry.

Nicole M. Coon

Nicole M. Coon

State of Ohio)
)
County of Franklin)

Case No. 2024-00243

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Nicole M. Coon, on 12/10/2024.

Paul D. Flory

Notary Public

My Commission Expires Never

Notary ID Number No ID



Paul D. Flory
Attorney At Law
Notary Public, State of Ohio
My commission has no expiration date
Sec. 147.03 R.C.