

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Electronic Application Of Kentucky Power Company)
For (1) A General Adjustment Of Its Rates For)
Electric Service; (2) Approval Of Tariffs And Riders;)
(3) Approval Of Accounting Practices To Establish)
Regulatory Assets And Liabilities; (4)Approval Of A)
Certificate Of Public Convenience And Necessity;)
And (5) All Other Required Approvals And Relief)

Case No. 2020-00174

SUPPLEMENTAL TESTIMONY OF
ALEX E. VAUGHAN
ON BEHALF OF KENTUCKY POWER COMPANY

**SUPPLEMENTAL TESTIMONY OF
ALEX E. VAUGHAN
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ALEX E. VAUGHAN ON BEHALF OF
KENTUCKY POWER COMPANY
BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY**

I. INTRODUCTION

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

2 A. My name is Alex E. Vaughan, and I am employed by American Electric Power
3 Service Corporation (“AEPSC”) as Director, Regulated Pricing and Renewables.
4 My business address is 1 Riverside Plaza, Columbus, Ohio 43215. AEPSC is a
5 wholly-owned subsidiary of American Electric Power Company, Inc. (“AEP”), the
6 parent Company of Kentucky Power Company (the “Company” or “Kentucky
7 Power”).

8 **Q. ARE YOU THE SAME ALEX E. VAUGHAN WHO OFFERED DIRECT**
9 **AND REBUTTAL TESTIMONY, SPONSORED RESPONSES TO DATA**
10 **REQUESTS, AND TESTIFIED AT THE NOVEMBER 2020 HEARING IN**
11 **THIS PROCEEDING?**

12 A. Yes.

II. PURPOSE OF TESTIMONY

13 **Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY?**

14 A. The purpose of my supplemental testimony is to respond to the Commission’s
15 January 13, 2021 Order in this case regarding proposed tariff NMS II and to provide
16 additional evidence in support of the Company’s net metering proposal.

17

III. SUMMARY OF SUPPLEMENTAL TESTIMONY

1 **Q. PLEASE SUMMARIZE YOUR SUPPLEMENTAL TESTIMONY AND**
2 **RECOMMENDATIONS.**

3 A. The following is a summary of my supplemental testimony:

- 4 • The full class cost of service (“CCOS”) analysis including separate classes for net
5 metering customers performed by Company Witness Stegall and described in Mr.
6 Stegall’s supplemental testimony confirms the cost of service analysis I previously
7 performed and sponsored in my rebuttal testimony;
- 8 • The load shape of the Company’s residential and commercial net metering
9 customers is more costly to serve than that of the standard tariff/rate classes to
10 which they belong, which supports charging net metering customers higher rates
11 for their reduced billing units to reduce the subsidy they are receiving from other
12 customers; and
- 13 • The Company’s NMS II proposal continues to be a fair, just and reasonable
14 transition away from full one-to-one kWh netting on all net metering system
15 production to a cost-based structure contemplated in SB 100, as it would charge net
16 metering customers for their net usage at the otherwise applicable standard tariff
17 rates and credit them for their excess generation at the Company’s actual avoided
18 costs.

19

IV. CLASS COST OF SERVICE RESULTS

1 **Q. PLEASE DESCRIBE THE RESULTS OF THE NET METERING CCOS**
 2 **PERFORMED BY COMPANY WITNESS STEGALL.**

3 A. Based on the Commission’s January 13, 2021 order, I requested that Company
 4 Witness Stegall perform a full CCOS study with the test year residential and
 5 commercial net metering customers removed from their respective standard tariff
 6 classes and instead included as their own customer classes. This would allow the
 7 Company to further evaluate the cost of service conclusions it has already put forth
 8 in this proceeding related to its net metering customers that were based on other
 9 peak coincidence, billing, and avoided cost analyses.¹ The results of the updated
 10 CCOS are summarized in the following table:

CLASS	Going-Level ROR	Relative ROR	Subsidy (Paid)/ Received (\$ in Millions)
Residential	-0.11 %	-0.04	\$31.8
Residential NMS	-6.97%	-2.44	\$0.02
Commercial & Industrial NMS	-2.12%	-0.74	\$0.02
General Service	7.26 %	2.54	(\$11.2)
Large General Service	6.39 %	2.23	(\$7.2)
IGS	5.62 %	1.97	(\$9.4)
Municipal Waterworks	9.51 %	3.33	(\$0.03)
Outdoor Lighting	15.21 %	5.32	(\$3.4)
Street Lighting	17.35 %	6.07	(\$0.6)
Total Kentucky Power Jurisdiction	2.86 %	1.00	\$0.0

11
 12 The net metering classes have significantly lower class rates of return compared to
 13 their standard tariff class counterparts. This means that the revenue from those
 14 customers is inadequate to cover the costs to serve them determined based on their

¹ Please refer to my direct and rebuttal testimonies and exhibits for this information.

1 unique characteristics and, as such, those customers are receiving rate subsidies
2 from other standard tariff customers.

3 **Q. WHAT DOES THE CCOS DEMONSTRATE REGARDING THE RATES**
4 **BEING CHARGED TO NET METERING CUSTOMERS?**

5 A. During the test year, net metering customers' rates were too low to cover the
6 Company's cost to serve them, and they are being subsidized by all other customers,
7 including non-net metering residential customers. Net metering customers' rates
8 would have to be increased significantly to bring their class returns to parity with
9 their standard tariff counterparts.

10 **Q. ARE THESE RESULTS CONSISTENT WITH YOUR PREVIOUS**
11 **TESTIMONY AND ANALYSES IN THIS PROCEEDING?**

12 A. Yes, this result is consistent with and was predicted based upon the peak analysis,
13 billing analysis and avoided cost analysis the Company has already provided in its
14 direct and rebuttal cases. The CCOS result is completely consistent with what one
15 would expect for a subset of customers that, like net metering customers, contribute
16 to the Company's cost allocation peaks, produce less revenues due to a reduction
17 in billing units, and utilize the Company's infrastructure for service every day.

18 **Q. WHAT IS THE QUANTIFIED SUBSIDY IN RATES THAT NET**
19 **METERING CUSTOMERS ARE CURRENTLY RECEIVING?**

20 A. The test year subsidy in rates for the residential and commercial net metering
21 customers is also shown in the above table. The Company's test year net metering
22 customers are receiving approximately \$40,000 in annual subsidies from other
23 customers. During the test year, the Company had 46 customers on tariff NMS,

1 which means that other customers are paying roughly \$870 per year per system in
2 subsidies under tariff NMS's existing one-to-one net metering provisions. This
3 subsidy amount relates only to base rate cost of service items included in this case.
4 It is reasonable to assume that further subsidies exist for other cost of service items
5 such as the Environmental Surcharge and the Decommissioning Rider.

6 **Q. BASED ON THE COMMISSION'S JANUARY 13, 2021 ORDER**
7 **REGARDING COGEN/SPP AVOIDED COSTS, SHOULD THE**
8 **COMMISSION ALSO CONSIDER A CHANGE TO TARIFF NMS II?**

9 A. Potentially. The Company's proposed NMS II avoided cost pricing utilized the
10 same PJM LMP forward pricing information for the avoided cost of energy
11 component as did its proposed Cogen/SPP tariff rates. The Commission's Order
12 changed Cogen/SPP tariff avoided energy rates from fixed, forward-looking LMP
13 values to hourly varying actual LMP values.² It would be reasonable and consistent
14 to modify Tariff NMS II pricing correspondingly.

V. CONCLUSION

15 **Q. HAS THE COMPANY ACCOUNTED FOR ALL ACTUAL**
16 **QUANTIFIABLE AVOIDED COSTS OF ELECTRIC SERVICE RELATED**
17 **TO CUSTOMERS' NET METERING SYSTEMS?**

18 A. Yes, as detailed in my direct and rebuttal testimonies, and further confirmed by the
19 supplemental CCOS analysis that Company Witness Stegall performed, all avoided
20 costs of electric service, inter-class, and intra-class cost shifting related to net
21 metering customer-generators has been accounted for. The Company's proposed

² January 13, 2021 Order at 100.

1 NMS II tariff fully incorporates these avoided costs of utility service in the avoided
2 cost rates for excess generation and proposes to charge customers a rate for their
3 net usage that is significantly lower than it should be when viewed in terms of the
4 CCOS and ratemaking principles discussed in this testimony. There are no other
5 actual cost of service factors/items missing from the analysis that would make
6 customer-generators' excess output more valuable than the rates the Company has
7 proposed, which represent the actual reduction in utility cost of service resulting
8 from the excess generation.

9 The results of these analyses also make logical sense when viewed from a
10 higher level in terms of utility service. If there truly existed a type of small
11 generator investment that made economic sense in a framework where it was
12 compensated for energy and capacity at the same wholesale market prices as all
13 other generators and resulted in a net reduction to the utility's cost of electric
14 service and rates for all customers, then utilities everywhere would be making just
15 such an investment. The reality as demonstrated by the facts in this proceeding, is
16 that such an investment only makes economic sense if it is subsidized by all other
17 customers.

18 **Q. IS THE COMPANY'S NMS II PROPOSAL FULLY SUPPORTED IN**
19 **ACTUAL COST OF SERVICE ANALYSIS, AND DOES IT REPRESENT A**
20 **REASONABLE WAY TO IMPLEMENT SB 100?**

21 A. Yes. The Company's NMS II proposal, as modified by my rebuttal testimony, is
22 fully supported by actual cost of service analysis and is a fair, just, and reasonable
23 way to implement SB 100.

1 Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL TESTIMONY?

2 A. Yes.



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E-Signature Summary

E-Signature 1: Alex E. Vaughan (AEV)

February 22, 2021 04:37:33 -8:00 [3E12D7E32486] [167.239.221.83]
 aevaughan@aep.com (Principal) (Personally Known)

E-Signature Notary: S. Smithhisler (SRS)

February 22, 2021 04:37:33 -8:00 [76556FA9F7B6] [167.239.221.83]
 srsmithhisler@aep.com
 I, S. Smithhisler, did witness the participants named above electronically sign this document.



VERIFICATION

The undersigned, Alex E. Vaughan, being duly sworn, deposes and says he is a Director-Regulatory Pricing & Renewables for American Electric Power Service Corporation that he has personal knowledge of the matters set forth in the forgoing testimony and the information contained therein is true and correct to the best of his information, knowledge and belief after reasonable inquiry.

Alex E. Vaughan
Signed on 2021/02/22 04:37:33 -8:00

Alex E. Vaughan

STATE OF OHIO

)

) Case No. 2020-00174

COUNTY OF FRANKLIN

)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Alex E. Vaughan, this 22nd day of February 2021.

S. Smithisler
Signed on 2021/02/22 04:37:33 -8:00

Notary Public



Notary ID Number: 2019-RE-775042

My Commission Expires: April 29, 2024

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