

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) A)
Securitization Financing Order; And (5) All Other)
Required Approvals And Relief)

Case No. 2023-00159

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

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

CASE NO. 2023-00159

I. INTRODUCTION

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

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

8 **Q. ARE YOU THE SAME ALEX E. VAUGHAN WHO OFFERED DIRECT**
9 **TESTIMONY IN THIS PROCEEDING?**

10 A. Yes, I am.

II. PURPOSE OF TESTIMONY

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

13 A. The purpose of my testimony is to rebut the testimony of Andy McDonald (“McDonald
14 Testimony”), filed on behalf of the Mountain Association, Appalachian Citizens’ Law
15 Center, Kentuckians for the Commonwealth, and/or Kentucky Solar Energy Society
16 (collectively, “Joint Intervenors”) regarding the following:

- 1 1. The Company's proposed Solar Garden Program;
- 2 2. The Company's recently issued request for proposals ("RFP") for
- 3 generation resources; and
- 4 3. Joint Intervenors' distributed energy and net metering
- 5 recommendations.

6 **Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.**

7 A. The Company's Solar Garden proposal is adequate and reasonable without adopting
8 Joint Intervenors' Witness McDonald's proposals. However, the Company agrees that,
9 should an opportunity to add storage to one or more of the projects make economic
10 sense within the proposed economic evaluation structure in my Direct Testimony, then
11 co-located storage could also be pursued.

12 No modifications are necessary to the Company's all-source RFP. The RFP is
13 a request for bids from existing supply-side resources and new resources that have
14 reached a certain level of project maturity and certainty. The RFP is not a signal for
15 new or conceptual distributed projects to begin planning and be considered in the
16 process.

17 Finally, The Company made no net metering proposals in this proceeding and
18 many of Mr. McDonald's proposals run counter to the net metering statute. Those
19 arguments should be disregarded in this case.

III. SOLAR GARDEN PROPOSAL

1 **Q. PLEASE ADDRESS THE FOUR RECOMMENDATIONS MADE BY JI**
2 **WITNESS MCDONALD ON PAGES 5-6 OF HIS DIRECT TESTIMONY.**

3 A. Mr. McDonald's Direct Testimony recommends that the Commission approve the
4 Company's Solar Garden distributed solar proposal but also includes four proposals
5 that he claims would improve the program. I will address those as follows:

6 **McDonald Solar Garden Proposal 1: Include evaluation of Power**
7 **Purchase Agreements ("PPAs") as an alternative to Company ownership of the**
8 **Solar Garden facilities.**

9 **Response:** This recommendation is unnecessary as the Company is always accepting
10 distributed solar PPAs that meet the requirements to be a qualifying facility under
11 PURPA. The avoided cost rates at which the Company is obligated to purchase the
12 output of such projects are included in the Company's Tariff COGEN/SPP-2. The
13 alleged cost disparity¹ between the generic project estimate for an owned distributed
14 solar project and the generic PPA price quoted by Mr. McDonald does not exist. The
15 price he quotes from the Level Ten PPA Price Index is for a different product than what
16 the Company is proposing in its Solar Garden Program in this case. The Level Ten
17 product is for a utility scale (predominantly transmission level interconnected),
18 wholesale market-facing solar project with a PPA for liquid trading hub settled energy
19 and the associated RECs. The Level Ten product does not include capacity, and the
20 average term of the PPA price he quoted was 14.6 years. This size and type of

¹ McDonald Direct page 5, lines 16-19.

1 project/product is not comparable to the smaller distribution connected load reducers
2 which the Company is proposing to include in its Solar Garden Program. Mr.
3 McDonald's pricing allegation is comparing apples to oranges.

4 **McDonald Solar Garden Proposal 2: Include battery storage in at least**
5 **one of the Solar Garden locations to provide enhanced resiliency, grid services,**
6 **and additional experience with solar plus storage systems.**

7 **Response:** This is a good recommendation, and the Company would be open to it so
8 long as the combined solar plus storage project passes the economic test I have
9 proposed in my Direct Testimony.

10 **McDonald Solar Garden Proposal 3: When selecting locations for the Solar**
11 **Garden facilities, consider the locational benefits for the distribution grid.**

12 **Response:** The Company agrees with this recommendation and the concept is implicit
13 in the Company's proposal as it will need to balance the available sites for such projects
14 with the needs of the distribution system to which they will need to interconnect. This
15 is especially true for any potential solar plus storage projects, as there could be added
16 economic value if the storage component of the project were to eliminate or defer the
17 need for any sort of traditional distribution system investment need at that particular
18 location. This concept is what is commonly referred to as "non-wires alternative"
19 value.

20 **McDonald Solar Garden Proposal 4: Expand the 25 MW aggregate limit**
21 **of the program if the projects are found to be economical.**

22 **Response:** The Company may propose to expand the program in the future if it is
23 successful in securing the initial 25 MW. The Company reasonably proposed an initial

1 cap on the program when considering the requested concurrent cost recovery for
2 projects identified under the Solar Garden Program.

IV. ALL-SOURCE RFP

3 **Q. PLEASE ADDRESS JOINT INTERVENOR WITNESS MCDONALD'S**
4 **COMMENTS² REGARDING THE COMPANY'S RECENT ALL-SOURCE**
5 **RFP.**

6 A. Joint Intervenor Witness McDonald's contention is that the Company's RFP structure
7 unfairly limits the amount of distribution level projects that will be able to bid into the
8 RFP. I disagree with him for several reasons. First, the RFP is a request for proposals
9 from projects that are already in some state of maturity and certainty in their
10 development. It is not a request for counterparties to begin evaluating potential projects
11 that were not previously being developed, or said another way, to begin conceptual
12 development of new projects. Second, the distribution impact study that Mr. McDonald
13 takes issue with simply puts distribution level projects on the same footing in the RFP
14 as transmission level projects, which are required to have a completed system impact
15 study to be considered in the RFP. This is a reasonable request as system
16 interconnection costs at the distribution or transmission level can materially change the
17 cost and economics of a proposed project. Third and finally, to allow distribution level
18 projects to submit new impact study requests is not practical from a timing standpoint.
19 The length of time needed to study such projects would push the RFP bid evaluation
20 and decision timeline out, which could lead to the Company missing out on the

² McDonald Direct at 31-32.

1 opportunity for other bids. This is a competitive market and project developers/owners
2 are only willing to hold or make available projects to the Company for so long.

3 The Company's capacity resource RFP structure is reasonable and fair to all
4 potential projects.

V. DER & NET METERING PROPOSALS

5 **Q. PLEASE ADDRESS MR. MCDONALD'S DISTRIBUTED ENERGY AND NET**
6 **METERING RECOMMENDATIONS.**³

7 A. The Company has proposed no changes to its net metering tariffs in this case. The
8 Commission should decline to consider modifications to those tariffs on that basis
9 alone. Nonetheless, I will address each of Mr. McDonald's recommendations:

10 **McDonald Net Metering Proposal 1: Eliminate the 1% limit on net**
11 **metering as an official Company policy.**

12 **Response:** As an initial matter, I disagree with Mr. McDonald's implication that the
13 Company would be insufficiently supporting the development and growth of
14 distributed energy resources ("DER") in its service territory if it did not eliminate the
15 1% limit on net metering that is presently set forth in Tariff NMS II. That Kentucky
16 Power supports DER is evident, among other things, from its Solar Garden proposal in
17 this case. Moreover, as Mr. McDonald points out,⁴ the 1% limit on net metering is
18 found in the language of the net metering statute, at KRS 278.466(1). Neither Mr.
19 McDonald nor I are qualified to provide a legal opinion regarding the meaning of the
20 statute's text or whether the statute's direction that a retail electric supplier "shall have

³ McDonald Direct at 18-30.

⁴ McDonald Direct at 16.

1 no further obligation to offer net metering to any new customer-generator at any
2 subsequent time” after the 1% limit is reached prohibits a retail electric supplier from
3 offering net metering to a new customer-generator beyond the 1% limit. Mr.
4 McDonald’s proposal also is misplaced for another important practical reason: Net
5 metering generating capacity totals only 0.23% of the Company’s single hour peak
6 load. Net metering capacity in the Company’s service territory would have to increase
7 by 440% in order to reach the existing 1% limit. Mr. McDonald therefore fails to
8 demonstrate a basis to change the NMS II tariff limit, regardless of whether the statute
9 would permit such a change.

10 **McDonald Net Metering Proposal 2: Raise the cap on net metering**
11 **customer system size from 45 kW up to at least 500 kW.**

12 **Response:** KRS 278.465(2)(c) defines the term “eligible electric generating facility”
13 to mean an electric generating facility that, among other things, “[h]as a rated capacity
14 of not greater than forty-five (45) kilowatts.” Facilities larger than 45 kW thus are not
15 eligible to take service under the Company’s net metering tariffs. Such facilities
16 nonetheless already can participate in the Company’s COGEN/SPP I and COGEN/SPP
17 II tariffs. For these reasons, the Commission should decline Mr. McDonald’s proposal
18 to increase the cap on the size of eligible net metering systems.

19 **McDonald Net Metering Proposal 3: Allow and encourage third-party**
20 **ownership of distributed solar systems (e.g., solar leases and power purchase**
21 **agreements) to expand access for residential, commercial, and industrial**
22 **customers.**

1 **Response:** It is my understanding based on the advice of counsel that Mr. McDonald's
2 third-party ownership proposals, under which a third-party would own and either lease
3 solar panels or sell the power generated by those panels to customers, would violate
4 Kentucky's certified territory statute (KRS 278.018).

5 **McDonald Net Metering Proposal 4: Allow and encourage Virtual Net**
6 **Metering to expand access to solar, especially for residents of multi-family**
7 **housing.**

8 **Response:** It is my understanding that virtual net metering currently is not
9 contemplated in the Kentucky statute enabling net metering. Furthermore, a more
10 economic solution that is equitable to all customers in this regard, rather than just
11 subscribing or chosen customers, is to make economic supply resources available to all
12 customers through general rates. Additionally, the Company's proposed low-income
13 credit that would be generated from a portion of the energy value from the Solar Garden
14 Program is a measured, targeted step in this direction that should not result in undue
15 rate subsidies such as those associated with virtual net metering. The difference being
16 that recipients of the Company's proposed low-income credit would still be paying full
17 retail rates but would receive what is essentially a fuel credit in the winter months.
18 Conversely, a virtual net metering customer would not pay for the transmission,
19 distribution, and generation service they are actually using because those billing units
20 would be "virtually" netted in billing.

21 **McDonald Net Metering Proposal 5: Focus on equity and access for low-**
22 **and moderate-income ("LMI") customers with policies to reduce up-front costs**
23 **and finance expenses, including on-bill financing.**

1 **Response:** Equity, access to least reasonable cost, safe, and reliable electric service to
2 all of its customers is always the Company's goal. Please also see the Rebuttal
3 Testimony of Company Witness West, who directly addresses on-bill financing.

VI. CONCLUSION

4 **Q. DOES THIS CONCLUDE YOUR PRE-FILED TESTIMONY?**

5 **A. Yes, it does.**

VERIFICATION

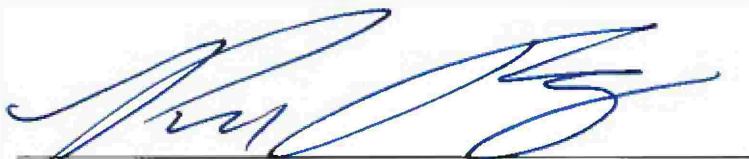
The undersigned, Alex E. Vaughan, being duly sworn, deposes and says he is the Managing Director for Renewables and Fuel Strategy for American Electric Power Service Corporation, that he has personal knowledge of the matters set forth in the foregoing testimony and the information contained therein is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


Alex E. Vaughan

State of Ohio)
County of Franklin)

Case No. 2023-00159

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Alex E. Vaughan, on 11/21/23.


Notary Public



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

My Commission Expires Never

Notary ID Number NC 10