

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

ELECTRONIC APPLICATION OF)
KENTUCKY POWER COMPANY FOR (1) AN)
ORDER APPROVING THE TERMS AND)
CONDITIONS OF THE RENEWABLE)
ENERGY PURCHASE AGREEMENT FOR)
SOLAR ENERGY RESOURCES BETWEEN)
KENTUCKY POWER COMPANY AND)
BRIGHT MOUNTAIN SOLAR, LLC; (2)) Case No. 2024-00243
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)

POST-HEARING BRIEF OF THE ATTORNEY GENERAL AND KIUC

I. INTRODUCTION

The Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention (“Attorney General”) and Kentucky Industrial Utility Customers, Inc. (“KIUC”) (collectively “AG/KIUC”) submit this Post-Hearing Brief.

The Commission should not approve Kentucky Power Company’s (“Kentucky Power” or “Company”) request to enter into an 80 MW Renewable Energy Purchase Agreement (“REPA”) with Bright Mountain Solar, LLC (“Bright Mountain”). Over the 15-year REPA term at a price of \$83.68 per MWh, the cost to ratepayers will be \$179.3

million nominal (\$101.8 million present value).¹ After accounting for the forecasted value of energy, capacity and renewable energy certificates (“REC”) from the REPA, the Company’s direct case shows a net harm to ratepayers of at least \$23.9 million nominal (\$14.6 million present value).² The Company’s rebuttal case shows a net harm to ratepayers of at least \$6.7 million nominal (\$4.7 million present value).³ And the Company’s calculations use very aggressive assumptions about the future market price of REC sales to customers in Virginia and Pennsylvania to meet the renewable portfolio standards (“RPS”) of those states. Selling RECs eliminates the green attributes of the REPA. Nor does the REPA provide substantial long-term economic development benefits, creating only 36 construction jobs and 4 ongoing local jobs in Perry County.⁴ This is the wrong resource at the wrong time. The contract provides minimal accredited capacity of only 4.8 MW at a time when Kentucky Power should be focused on addressing its substantial capacity deficit of 115 MW in 2026, 66 MW in 2027 and (assuming the Commission approves the sale of Mitchell) 713 MW in 2028.⁵

¹ Wellborn Direct Testimony at 5.

² Wellborn Direct Testimony at 5.

³ KIUC Hearing Exhibit 2.

⁴ Hearing Tr. at 10:23.

⁵ Wolfram Direct Testimony at 4. Mr. Wolfram’s Testimony assumes that the Commission will approve the sale of Kentucky Power’s 50% ownership interest in Mitchell before 2028. AG/KIUC do not agree with that assumption. Unless and until the Commission actually approves the sale of the Company’s 50% ownership interest in Mitchell, the assumption should be that the 780 MW from Mitchell will be maintained.

II. STANDARD OF REVIEW

Kentucky Power filed its Application pursuant to KRS 278.300 and KRS 278.020. KRS 278.300(3) provides that “[t]he commission shall not approve any issue or assumption unless, after investigation of the purposes and uses of the proposed issue and the proceeds thereof, or of the proposed assumption of obligation or liability, the commission finds that the issue or assumption is for some lawful object within the corporate purposes of the utility, is *necessary or appropriate for or consistent with the proper performance by the utility of its service to the public* and will not impair its ability to perform that service, and is *reasonably necessary and appropriate* for such purpose.”⁶

KRS 278.020(1) provides “[n]o person, partnership, public or private corporation, or combination thereof shall commence providing utility service to or for the public or begin the construction of any plant, equipment, property, or facility for furnishing to the public any of the services enumerated in KRS 278.010...until that person has obtained from the Public Service Commission a certificate that public convenience and necessity require the service or construction.” *Kentucky Utilities Co. v. Public Service Comm'n*, 252 S.W.2d 885 (Ky App. 1952) sets forth a two-part test for approval of a CPCN: (1) need; and (2) absence of wasteful duplication.

"Need" requires “a showing of a substantial inadequacy of existing service, involving a consumer market sufficiently large to make it economically feasible for the new system or facility to be constructed or operated. [T]he inadequacy must be due either

⁶ Emphasis added.

to a substantial deficiency of service facilities, beyond what could be supplied by normal improvements in the ordinary course of business; or to indifference, poor management or disregard of the rights of consumers, persisting over such a period of time as to establish an inability or unwillingness to render adequate service.”⁷

“Wasteful duplication” is defined as “an excess of capacity over need” and “an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties.”⁸ To demonstrate that a proposed facility does not result in wasteful duplication, the Commission has held that the applicant must demonstrate that a thorough review of all reasonable alternatives has been performed.⁹ The fundamental principle of a reasonable, least-cost alternative is embedded in such an analysis.¹⁰ Selection of a proposal that ultimately costs more than an alternative does not necessarily result in wasteful duplication. All relevant factors must be balanced.¹¹

Importantly, Kentucky Power is not only requesting that the REPA be approved but is also requesting ratemaking treatment for the associated expenses. KRS 278.030 requires that utilities may only charge fair, just, and reasonable rates. “Every utility may

⁷ *Kentucky Utilities Co.* at 890.

⁸ *Kentucky Utilities Co.* at 890.

⁹ *Electronic Application of East Kentucky Power Cooperative, Inc. for an Amendment to Its Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Madison County, Kentucky*, Case No. 2024-00263, Order (December 23, 2024) (citing *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky*, Case No. 2005-00142, Order (Sept. 8, 2005)).

¹⁰ *Id.* (citing *Kentucky Utilities Co. v. Pub. Serv. Comm'n*, 390 S.W.2d 168, 175 (Ky. 1965) and *The Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity to Construct a 138 kV Electric Transmission Line in Rowan County, Kentucky*, Case No. 2005-00089, Order (Aug. 19, 2005)).

¹¹ *Id.* (citing *The Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity to Construct a 138 kV Electric Transmission Line in Rowan County, Kentucky*, Case No. 2005-00089, Order (Aug. 19, 2005)).

demand, collect and receive fair, just and reasonable rates for the services rendered or to be rendered by it to any person.”¹² Further, the Commission has the authority to determine whether purchases are prudent, and has even opined, in a case directly related to a proposed procurement by Kentucky Power, that a solar resource is prudent where the present value of net benefits exceeds that of an equivalent resource.¹³

III. ARGUMENT

A. This Application Does Not Satisfy the Requirements of KRS 278.300, KRS 278.020 or KRS 278.030.

The financial obligations the Company will assume under the proposed REPA are not necessary, appropriate or consistent with the obligations by Kentucky Power to serve the public, as required by KRS 278.300. Kentucky Power has failed to demonstrate adequately that there is a need for the proposed REPA and that the REPA will not result in wasteful duplication, as required by KRS 278.020. Kentucky Power has also failed to demonstrate that the proposed REPA is prudent and that the proposed ratemaking for the costs and benefits of the REPA will result in rates that are fair, just and reasonable, as required by KRS 278.030.

¹² KRS 278.030(1).

¹³ See Case No. 2023-00159, *Electronic Application of Kentucky Power Company for (1) a General Adjustment of its Rates for Electric Services; (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*, Order of January 19, 2024. “Solar projects would be considered prudent if the net present value (NPV) of the benefits and costs of the project do not exceed the NPV of the equivalent avoided capacity cost.”

1. The REPA Is Not The Least-Cost Reasonable Resource Available To Meet The Needs Of Customers.

The Company's direct and rebuttal cases both demonstrate that costs under the proposed REPA are in excess of what it would have otherwise cost the Company to procure those same capacity and energy resources by other means. The Company's direct case quantifies a net harm to customers of \$23.9 million nominal (\$14.6 million present value).¹⁴ The Company's rebuttal case quantifies a net harm to customers of \$6.7 million nominal (\$4.7 million present value).¹⁵ Both of these present value net harms need to be increased by the \$765,000 modeling error conceded in Ms. Coon's Rebuttal Testimony.¹⁶ When originally modeling the market energy value provided by the REPA, Ms. Coon assumed a 100% on-peak energy pricing even though weekend days are all off-peak.

The REPA has an effective date of July 19, 2024. This case, including the Company's direct testimony, was filed just twelve days later. Therefore, at the time it signed the REPA, the Company knew or should have known that the contract will result in a net harm to customers of \$14.6 million present value. It is only by chance that the net harm has decreased since the filing of rebuttal testimony because of increased PJM energy prices (which increased the value of the fixed price \$83.68 per MWh REPA). Why would Kentucky Power knowingly sign an uneconomic contract? As pointed out by Chair

¹⁴ Wellborn Direct Testimony at 5.

¹⁵ KIUC Hearing Exhibit 2.

¹⁶ Coon Rebuttal Testimony at 3.

Hatton at the hearing, after construction, the REPA creates only 4 ongoing local jobs in Perry County.¹⁷ The potential economic development benefits are therefore small.

The first-year net harm to the average residential customer ranges from \$4.08 (\$0.34 per month)¹⁸ to \$3.48 (\$0.29 per month).¹⁹ This may seem small to some, but not to the already over-burdened people of Eastern Kentucky. If the average consumer knew that the utility was increasing rates unnecessarily, they would be angry.

Kentucky Power is currently working with the Commission, the Legislature, the Attorney General and KIUC to reduce rates through securitization and other means. We welcome that process. But this REPA is at cross purposes.

2. The REPA Is Uneconomic Under The Majority Of Sensitivity Runs.

While the Company's admission that the REPA is a net loser for customers under all of its assessments should be fatal, the losses under the REPA are likely to be even greater than the amounts forecasted by the Company.

AG/KIUC witness Ms. Wellborn performed twelve sensitivity analyses. She modeled four REC prices and a 20% sensitivity on energy (80% and 120% of the Company's energy price forecast). Ten of the twelve model runs showed net harm to

¹⁷ Hearing Tr. at 10:23.

¹⁸ Coon Direct Testimony at 5.

¹⁹ Wolfram Rebuttal Testimony at 9.

consumers.²⁰ The present value net harm ranged from \$66 million to \$4 million.²¹ There was a present value net benefit in two runs of \$13 million and \$4 million.²²

In rebuttal, Company witness Coon modeled nine sensitivity analyses using low, base and high energy prices, combined with three different REC prices.²³ Five of her nine runs showed a net harm to consumers, with the largest present value net harm being \$40 million.

3. REC Pricing Assumptions Are Inherently Risky.

The cost of the REPA is fixed at \$83.68 per MWh. The Company assumed a 21.4% capacity factor, yielding 150,008 MWh of solar energy production in the first year.²⁴ The Company also assumed that the output from the solar project would degrade by about one-half percent per year.²⁵ Using these inputs, neither AG/KIUC witness Kollen nor Wellborn contested that the 15-year cost of the REPA would be \$179.3 million.

But the benefit side of the equation (avoided PJM energy purchases, avoided PJM capacity purchases, and REC sales revenue) is extremely uncertain - especially the REC sales price. The Company assumed that it would sell RECs to consumers in Virginia and Pennsylvania to meet those states RPS mandates.²⁶ The Company assumed that these

²⁰ Wellborn Direct Testimony at 13.

²¹ Id.

²² Id.

²³ Coon Rebuttal Testimony at 8.

²⁴ KIUC Hearing Exhibit 1, Company Response to AG/KIUC 1-7.

²⁵ Id.

²⁶ Coon Rebuttal Testimony at 5..

REC sales would yield \$74.4 million over 15 years.²⁷ This \$74.4 million assumption is critical to this case.

In Virginia, the Legislature changed its RPS law six times since 2007.²⁸ Because the mandate to purchase RECs increases costs to consumers, it would not be surprising if the RPS mandates were loosened and the demand for RECs was reduced (along with the price). In Virginia, from 2021 to 2024 Dominion and Appalachian Power were able to purchase RECs from any renewable facility in PJM.²⁹ However, beginning in 2025, at least 75% of the RECs used by Dominion must come from renewable resources in Virginia.³⁰ This will lower the demand for RECs produced in Kentucky, along with the price.

The Company supplemented its response to AG/KIUC 1-15 to further support its REC pricing assumptions.³¹ But it does the opposite. This data response shows actual REC sales from renewable facilities in Kentucky. From 2018 through 2024, the REC sales price from Kentucky renewable facilities averaged \$19.78 per MWh. The Company assumed a REC sales price from 2029 through 2041 that averaged \$34.07 per MWh.³² This is a difference of 72.2%.

²⁷ Wellborn Direct Testimony at 5.

²⁸ Company Response to AG/KIUC 2-6.

²⁹ Id.

³⁰ Id.

³¹ KIUC Hearing Exhibit 3, Company Response to AG/KIUC 1-15.

³² KIUC Hearing Exhibit 1, Company Response to AG/KIUC 1-7.

The Kentucky REC sales market is thin, volatile and unproven. From 2018 through 2024, the number of Kentucky RECs sold averaged 114,639 annually.³³ The Bright Mountain facility will produce 150,008 RECs in the first year. This will more than double the Kentucky supply which, all else equal, will reduce the price.

From 2018 to 2019, the average Kentucky REC sales price *increased by 47.7%*. The next year the price *decreased by 43.7%*. The year after that the price went *up by 54.1%*. The next year the price went *down by 12.4%*.³⁴ The Kentucky REC market appears to be as volatile as Bitcoin. A public utility should not gamble ratepayer money in the REC market.

Finally, energy from Bright Mountain is only “green” if the RECs produced by the project are retired through the PJM Generation Attribute Tracking System (“GATS”). But retiring RECs means no REC revenue. If the RECs are sold, then Bright Mountain energy is “brown”. Kentucky Power has adequate “brown” energy from Mitchell Units 1 and 2, Big Sandy Unit 1, the PJM energy market and potentially other dispatchable fossil resources.

4. Acquiring A 4.8 MW Capacity Resource When The Company Has A Large Capacity Deficit Is Unreasonable.

Kentucky Power projects that it will have a capacity deficit of 115 MW beginning in 2026 and 66 MW in 2027.³⁵ If the Commission approves the sale of the Company’s 50%

³³ KIUC Hearing Exhibit 3, Company Response to AG/KIUC 1-15.

³⁴ Id.

³⁵ Wolfram Direct Testimony at 4.

ownership interest in Mitchell, then its capacity deficit will increase by another 713 MW in 2028.³⁶

But this REPA provides no meaningful capacity. Due to the extremely low Effective Load Carrying Capability (“ELCC”) placed on solar resources by PJM, the Company estimates that the 80 MW nameplate capacity of the resource will only yield a minimal capacity value of 4.8 MW.³⁷ Therefore, the project will address only a negligible amount of Kentucky Power’s capacity need. Importantly, ELCC values are projected to decrease further over time, reaching 3% in 2034. This means that the accredited capacity value of the REPA will decline over the life of the contract.

On February 12, 2025, AEP and Kentucky Power testified to the Kentucky Senate that securitization of the net book value of the Company’s 50% ownership interest in Mitchell is critical to reducing rates. That is where the focus should be, and money should not be wasted on this low-value, high-risk REPA.

5. Denying This Application Need Not Kill The Project.

The developer of Bright Mountain is Avangrid Renewables, LLC (“Avangrid”). According to Kentucky Power witness Mr Yetzer, *“Avangrid has more than \$10 billion of operating assets totaling more than 8.5 GW of operating wind and solar generation in more than 22 states.”*³⁸ If this Application is denied, then Avangrid can move forward with the project on a merchant basis. As a merchant generator, all of the risks and rewards of

³⁶ Id.

³⁷ Application at 3. AEP forecasts the accredited capacity will decline over the 15-year term of the contract in its calculations of the capacity value provided by the resource. Refer to Company Response to Staff 1-7.

³⁸ Yetzer Direct Testimony at 11.

selling energy, capacity and RECs will be on this \$10 billion company, not on the people and businesses of Eastern Kentucky.

IV. CONCLUSION

Put simply, the REPA is not economical. That is a fact acknowledged by the Company. Stripped of the environmental attributes through sale of the RECs, it is a “green herring”, nothing more than a high-cost energy purchase that will impose unnecessary and unreasonable costs on customers. The Commission should eliminate this risk by denying approval of the REPA.

Respectfully submitted,

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Certificate of Service and Filing

Pursuant to the Commission's Orders and in accord with all other applicable law, Counsel certifies that, on February 21, 2025, a copy of the foregoing was served via the Commission's e-filing system.

This 21st day of February, 2025.

A handwritten signature in blue ink, appearing to read "J. Michael West".

Assistant Attorney General