**DATA REQUEST**

**1_1** Refer to Kentucky Power's Application, page 5, paragraphs 14 and 15, and page 10, paragraph 31. Discuss whether Kentucky Power generally plans to construct or purchase generation stations with capacity sufficient to serve the anticipated Tariff economic development rate (EDR) customers. If Kentucky Power plans to secure fixed assets to fulfill its capacity requirements, describe the benefit to Kentucky Power's -3- Case No. 2022-00181
nonparticipating customers of the discounted rates for the anticipated Tariff EDR customers.

**RESPONSE**

Kentucky Power is obligated to provide adequate, efficient, and reasonable service to its customers. Economic development generally benefits the Company's service territory, including nonparticipating customers, "by encouraging both existing and potential commercial and industrial customers to invest capital in … [eastern Kentucky], thereby creating jobs and stimulating Kentucky's economy." *Public Service Commission of Kentucky v. Commonwealth*, 320 S.W.3d 660, 662 (Ky. 2010). The Company's service territory has sustained a decade-long decline in load, jobs, and population with the partial demise of coal mining and large industrial enterprises. *See* Kentucky Power's Application at ¶¶ 19-31. This decline in turn has placed upward pressure on rates by requiring that the Company's fixed costs be spread over a declining number of customers and load. Economic development, such as would be facilitated under the Company's proposal, produces increased load, spreading the fixed costs of the utility over a larger load. It also benefits non-participating customers from the add-on effects of population growth and associated commercial growth.

Kentucky Power's economic development efforts have yielded a significant pipeline of projects that will bring needed employment and investment to the Company's service territory. The Company estimates over 1,000 full-time positions will be realized from the 12 proposed EDR customers over the next several years.

Kentucky Power's December 2022 Integrated Resource Plan ("IRP") will inform its proposed course of action for meeting the Company's load requirements. It is anticipated that the IRP will result in a request for proposal ("RFP") that will be issued in 2023 for both owned assets as well as power purchase agreements ("PPA") for capacity. In short, whether the Company secures capacity through the Power Coordination Agreement, in the short term, enters into longer term PPAs, or owns generation assets, nonparticipating customers will benefit from lower capacity costs as those costs will be spread over a larger total load.

Witness: Brian K. West

Kentucky Power Company
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Dated June 24, 2022

**DATA REQUEST**

**1_2** Refer to Kentucky Power's Application, page 17, paragraph 53, in which Kentucky Power states that deleting the discount offset provision of Tariff EDR would allow it and its customers to obtain the benefits of EDR agreements while protecting them from bearing the costs associated with any such agreement. Explain how the deletion of the discount offset provision would protect Kentucky Power's other customers from bearing the costs associated with a prospective EDR agreement.

**RESPONSE**

Kentucky Power's internal load varies each day with the weather and the operations of its customers. New industrial load with high load factors, such as that provided through cryptocurrency operations, makes more efficient use of capacity resources than variable existing load, thereby limiting any costs required by the acquisition of additional capacity to serve new EDR customers.

Further, because load varies constantly, will the Company need to attempt to determine this on an hour-by-hour basis to assess capacity costs to participating or nonparticipating customers?

If Tariff E.D.R. discounts are reduced or eliminated all together by the current requirement, the Company believes that many of the proposed EDR customers will locate elsewhere, depriving Kentucky Power of the benefits of the increased load. In fact, a condition precedent to qualifying under Tariff E.D.R. for the discounts is that the prospective customer must demonstrate it would not locate or expand in the Company's service territory in the absence of the Tariff E.D.R. discounts.

Finally, the cryptocurrency mining EDR customers with which the Company has been in negotiations have indicated their intent also to takes service under Tariff D.R.S. Doing so will allow the Company to shave peaks thereby minimizing the need for additional capacity. In addition, revenues received from EDR customers that exceed marginal costs, as required for Tariff E.D.R., will contribute to the Company's fixed costs that otherwise would have been paid by nonparticipating customers. This translates to lower costs for all customers as fixed costs are spread over a larger total load.

Witness: Brian K. West

**DATA REQUEST**

**1_3** Refer to Kentucky Power's Application, page 11, paragraph 35. State whether the anticipated contracts will include interruptible service. If so, provide the approximate amount of firm capacity included in the 482.5 MW of anticipated contract capacity.

**RESPONSE**

All EDR contracts for cryptocurrency operations include an interruptible component through Tariff D.R.S., unless the customer specifically indicates otherwise. The approximate amount of firm capacity included in the 482.5 MW of anticipated contract capacity is 126 MW.

Witness: Brian K. West

**DATA REQUEST**

**1_4** Refer to Kentucky Power's Application, page 15, paragraphs 46, 47, and 48.
a. State whether the discounted rates will exceed the variable cost of service and contribute to Kentucky Power's fixed costs.
b. Describe how Kentucky Power proposes to demonstrate that the discounted rates will exceed the variable cost of service and contribute to Kentucky Power's fixed costs.
c. State whether the marginal costs will include capacity purchases.

**RESPONSE**

a. A marginal cost analysis will be performed for each proposed EDR contract. If expected revenues exceed marginal costs, the discounted rates will contribute to the Company's fixed costs.

Please see KPCO_R_KPSC_1_4_Attachment1. It illustrates the Company's standardized marginal cost study for EDR customers. This analysis has been employed to satisfy Finding 6 of the Commission's Administrative Order 327 for EDR customers. A marginal cost study is required to be filed in connection with any proposed contracts for EDR customers. Additionally, for any approved EDR customers the Company is required to file a marginal cost study a) annually in accordance with the Commission's March 4, 2014 Order in Case No. 2014-00336 and, b) with any base rate case filing in accordance with Finding 8 of the Commission's Administrative Order 327. The analysis illustrated in KPCO_R_KPSC_1_4_Attachment1 is used to satisfy these requirements.

The Company's marginal cost study considers four incremental costs:

<u>Energy</u> – additional cost for the Customer's energy consumption. Utilizes the Customer's expected kWh multiplied by the Day-Ahead Locational Marginal Pricing.

<u>Distribution</u> –additional costs not reimbursed by the EDR customer to integrate the Customer into the Company's distribution system, except for metering which the Company bears the costs pursuant to 807 KAR 5:041, Section 10(1).

<u>Transmission</u> – additional cost to Kentucky Power's Network Integration Transmission Service ("NITS") expense for the Customer's projected MW.

<u>Generation capacity</u> – only used for those periods when the Company is capacity short. The Company currently has surplus capacity of over 115 MW, and it expects that surplus to remain through December 7, 2022 when the Company's Rockport Unit Power Agreement ("UPA") expires. The Company will replace only a portion of the Rockport UPA capacity.

The Company plans to make bilateral purchases for the PJM 2022-2023 (stub period only) and 2023-2024 planning years to meet the capacity needs of the Company's customers, including new EDR customers, during times when excess capacity may not exist. Between December 8, 2022 and May 31, 2023 (which is the "stub period" after the Rockport UPA expires where Kentucky Power will continue to purchase needed excess capacity from Kentucky Power's AEP affiliates until the end of the 2022-2023 PJM planning year), it is likely that capacity purchased will cost less than that provided under the Rockport UPA. Thus, the Company would not incur any additional incremental costs to purchase capacity otherwise provided by Rockport through at least May 31, 2023.

Consequently, the Company has yet to perform a calculation related to expenses for generation capacity.

Total incremental revenues must exceed incremental costs in order to qualify for Tariff E.D.R.

b. Kentucky Power will demonstrate that the discounted rates will exceed the variable cost of service and contribute to its fixed costs by performing a marginal cost analysis for each EDR customer. Please see the Company's response to subpart a.

c. No.

Witness: Brian K. West

# Sample Marginal Cost Study

| Ln No. | Marginal Costs - Energy | |
|---|---|---|
| **(1)** | Annual kWh | XXX,XXX,XXX |
| **(2)** | DA LMP $/kWh | X.XXXX |
| **(3)** =(1)*(2) | Marginal Costs - Energy | $X,XXX,XXX |
| | **Marginal Costs - Distribution** | |
| **(4)** | Distribution WO Total | $XXX,XXX |
| **(5)** | Levelized Carrying Cost | XX.XX% |
| **(6)** =(4)*(5) | Annual Dist Incremental Cost | $XX,XXX |
| | **Summary of Incremental Costs and Revenues** | |
| **(7)** | Energy | $X,XXX,XXX |
| **(8)** | Distribution | $XX,XXX |
| **(9)** | PJM LSE Transmission | $X,XXX,XXX |
| **(10)** | Generation Capacity | $XX,XXX |
| **(11)** =(7)+(8)+(9)+(10) | Total Incremental Costs | $X,XXX,XXX |
| **(12)** | Incremental Revenue | $X,XXX,XXX |
| **(13)** =(12)-(11) | **Net Revenue (Cost)** | **$XXX,XXX** |

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**DATA REQUEST**

**1_5** Refer to Kentucky Power's Application, Exhibit 3, P.S.C. KY. No. 12, 1st Revised Sheet No. 37-1, paragraph 2 under terms and conditions. Confirm that Kentucky Power is removing the provision stating that customers receiving temporary service are not eligible for Tariff EDR. If confirmed, explain why customers receiving temporary service should now be eligible for Tariff EDR. If not confirmed, explain.

**RESPONSE**

The statement cannot be confirmed. Kentucky Power is not proposing to delete the requirement that customers receiving Temporary Service are not eligible for Tariff E.D.R. That requirement should remain. The application included a scrivener's error.

Please see KPCO_R_KPSC_1_5_Attachment1 for a revised Exhibit 3 reincorporating the requirement.

Witness: Brian K. West

KENTUCKY POWER COMPANY — P.S.C. KY. NO. 12 1st REVISED ~~ORIGINAL~~ SHEET NO. 37-1

CANCELLING P.S.C. KY. NO. 12~~1~~ ORIGINAL SHEET NO. 37-1

**TARIFF E.D.R.**
**(Economic Development Rider)**

**AVAILABILITY OF SERVICE.**

To encourage economic development in the Company's service territory, limited-term reductions in billing demand charges described herein are offered to qualifying new and existing retail customers who make application for service under this Rider.

Service under this Economic Development Rider (EDR) is intended for specific types of commercial and industrial customers whose operations, by their nature, will promote sustained economic development based on plant and facilities investment and job creation. Customers receiving Temporary Service are not eligible to participate in Tariff E.D.R. Availability is limited to customers on a first-come, first-served basis until such time as a total of 5~~2~~50 MW of new load has been added to Kentucky Power's system under the EDR. The EDR is available to commercial and industrial customers served under Tariffs L.G.S. and I.G.S. who meet the following requirements:

(1) A new customer must have at least a monthly maximum billing demand of 500 kW. An existing customer must increase its monthly maximum billing demand by at least 500 kW over the current Base Maximum Billing Demand in order to receive the Incremental Billing Demand Discount (IBDD).

(2) A new customer, or the business expansion by an existing customer, will receive a Supplemental Billing Demand Discount (SBDD) for creating and sustaining at least 25 new permanent full time jobs over the contract term at the service location. The Company reserves the right to verify job counts. Failure to demonstrate the creation of new employment positions or to maintain the employment during the contract term will result in the termination of the supplemental discount.

(3) The customer must demonstrate to the Company's satisfaction that, absent the availability of this EDR, the qualifying new or increased electrical demand would be located outside of the Company's service territory or would not be placed in service.

**TERMS AND CONDITIONS.**

(1) ~~The Company will offer the EDR to qualifying customers with new or increased load when the Company has sufficient generating capacity available. When sufficient generating capacity is not available, the Company will procure the additional capacity on the customer's behalf. The cost of capacity procured on behalf of the customer shall reduce on a dollar-for-dollar basis the customer's IBDD and SBDD. Such reduction shall be capped so that the customer's maximum demand charge shall be the non-discounted tariff demand charge. The reduction will be applied in reverse chronological order beginning with the most recent customer to receive discounted service under this tariff. The last customer to sign up for the EDR tariff would be the first customer responsible for paying the cost of incremental capacity purchases. In any year during the discount period in which the customer pays the full tariff demand charge for all twelve months, the Company will reduce the term of the contract by one year.~~

~~(2) The new or increased load cannot accelerate the Company's plans for additional generating capacity during the period for which the customer receives a demand discount. Customers receiving Temporary Service are not eligible for this EDR.~~

~~(3)~~ To receive service under this EDR, the customer shall make written application to the Company with sufficient information contained therein to determine the customer's eligibility for service. At a minimum, such information must include:

(Cont'd on Sheet 37-2)

DATE OF ISSUE: June 10, 2022~~February 2, 2021~~
DATE EFFECTIVE: Service Rendered On And After ~~January 14, 2021~~July 11, 2022
ISSUED BY: /s/ Brian K. West
TITLE: Vice President, Regulatory & Finance
By Authority Of an Order of the Public Service Commission
In Case No. XXXX~~2020~~-~~00174~~XXXXX Dated ~~January 13~~XXXX XX, ~~2021~~ XXXX

## VERIFICATION

The undersigned, Brian K. West, being duly sworn, deposes and says he is the Vice President, Regulatory & Finance for Kentucky Power Company, that he has personal knowledge of the matters set forth in the foregoing responses and the information contained therein is true and correct to the best of his information, knowledge, and belief.

Brian K. West

Commonwealth of Kentucky )
) Case No. 2022-00181
County of Boyd )

Subscribed and sworn before me, a Notary Public, by Brian K. West this 27th day of June, 2022.

JENNIFER A. YOUNG
Notary Public
Commonwealth of Kentucky
Commission Number KYNP31964
My Commission Expires Jun 21, 2025

Notary Public

My Commission Expires 6/21/25

Notary ID Number: KYNP31964