COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Electronic Tariff Filing Of Kentucky Power	)	
Company For Approval Of A Special Contract	)	Case No. 2022-00387
With Ebon International, LLC	)	

REBUTTAL TESTIMONY OF

BRIAN K. WEST

ON BEHALF OF KENTUCKY POWER COMPANY

REBUTTAL TESTIMONY OF
BRIAN K. WEST ON BEHALF OF
KENTUCKY POWER COMPANY
BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

CASE NO. 2022-00387

TABLE OF CONTENTS

EXHIBITS

**REBUTTAL TESTIMONY OF
BRIAN K. WEST ON BEHALF OF
KENTUCKY POWER COMPANY
BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY**

CASE NO. 2022-00387

I. INTRODUCTION

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

A. My name is Brian K. West. My position is Vice President, Regulatory & Finance for Kentucky Power Company ("Kentucky Power" or the "Company"). My business address is 1645 Winchester Avenue, Ashland, Kentucky 41101.

Q. ARE YOU THE SAME BRIAN K. WEST WHO OFFERED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes.

II. PURPOSE OF REBUTTAL TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to address certain positions taken by Stephen J. Baron, witness for the Office of the Attorney General of the Commonwealth of Kentucky and Kentucky Industrial Utility Customers, Inc. (collectively, "AG-KIUC"), and Stacy L. Sherwood and Chelsea Hotaling, witnesses for Mountain Association, Kentuckians For The Commonwealth, Appalachian Citizens' Law Center, Sierra Club, and Kentucky Resources Council, Inc. (collectively, "Joint Intervenors").

Q. ARE YOU SPONSORING ANY REBUTTAL EXHIBITS?

A. Yes, I am sponsoring the following rebuttal exhibits:

Exhibit BKW-R1: June 2022 IRP Load Forecast

Exhibit BKW-R2: Post-IRP Updated Load Forecast

Exhibit BKW-R3: PJM Planning Load Obligation Forecast

III. AG-KIUC CONCERNS

Q. WHY DID THE COMPANY PURSUE A SPECIAL CONTRACT WITH EBON?

A. The Company recognized that absent special consideration there were two alternative paths forward:

a) *Ebon simply not materializing within the Commonwealth of Kentucky.*

Company Witness Clark addresses why this project represents a significant economic development benefit to these communities that are in desperate need of such. These benefits are not captured by simply calculating an estimated marginal cost analysis, as Mr. Baron has done.

b) *Ebon taking firm service in the Company's service territory at full load.*

This would expose the Company and its other customers to significantly greater risk than the proposed Special Contract.

Q. DOES MR. BARON ADDRESS EITHER OF THE ABOVE ISSUES WITHIN HIS TESTIMONY?

A. No, he does not.

Q. ON WHAT KENTUCKY POWER TARIFFS IS THE SPECIAL CONTRACT BASED?

A. The Special Contract is based on Tariff Industrial General Service ("I.G.S.") and Rider Demand Response Service ("D.R.S.") and includes certain discounts modeled after those available under Tariff Economic Development Rider ("E.D.R."). The Company has an obligation to serve all customers that desire to locate in its service territory, and Ebon International, LLC ("Ebon") is entitled and qualified to take service under Tariff I.G.S. However, with a load of Ebon's magnitude, it is in no one's best interest to serve Ebon under just firm Tariff I.G.S. and allow their full peak demand levels to cause larger incremental costs.

If Ebon were to receive firm service under Tariff I.G.S. it would result in Kentucky Power needing to plan to serve that entire load, including firm capacity and a required reserve margin. However, under the Special Contract, Kentucky Power has incorporated provisions that include the application of peak shaving provisions under Rider D.R.S., which can significantly reduce the amount of capacity that the Company will need to plan for and have. This was an important requirement of the Special Contract and one that otherwise could not be required of Ebon, absent its agreement. These peak-shaving provisions reduce the amount of the potential risk on all customers of any long-term capacity procurement, whether a fixed asset or purchased power, resulting from the service provided to this customer.

Further, the special contract provides the ability to reduce the customer's firm service load to 25 MW, which is the Company's expectation, or no more than 47.5 MW

(250 MW – 202.5 MW, which is 90% of Ebon's Phase Two Interruptible Capacity)[1] before a penalty would be assessed. As a result of that provision, Ebon should have a much smaller impact on Kentucky Power's load requirements than if they were a higher firm service customer.

Q. HOW DOES THE SPECIAL CONTRACT VARY FROM TARIFF I.G.S. AND RIDER D.R.S.?

A. The Special Contract considers two items not within Tariff I.G.S. or Rider D.R.S. First is the rate discount which provided the Company a competitive tool in which to secure Ebon to its footprint and provide significant economic development benefits therein. Second is a floor price mechanism which provides important protection for other customers by ensuring that Ebon covers its marginal costs.

Q. WHY DID THE COMPANY NOT MOVE FORWARD WITH TARIFF E.D.R. INSTEAD OF THE SPECIAL CONTRACT?

A. As stated in my Direct Testimony, Ebon required a more complex billing calculation. In addition, filing as a special contract preserves the remaining MW under the cap for Tariff E.D.R. for other prospective customers. In addition, if it were possible for Ebon to take service under Tariff E.D.R., the protections offered by the floor price mechanism would not exist.

Economic development remains a critical strategy for Kentucky Power and one customer utilizing the entirety of its tariff directly focused on encouraging economic development would not be the best use of the tariff, when it is possible to offer similar discounts outside the tariff, with the Commission's approval. Company Witness Clark

[1] See the Company's Rider D.R.S. at Sheet No. 36-2 (Interruption Event Compliance).

will discuss further the importance of economic development for Kentucky Power's service territory.

Q. DOES RIDER D.R.S. INCLUDE PROTECTIONS IN THE EVENT EBON FAILS TO INTERRUPT DURING AN EVENT?

A. Yes. The terms of Rider D.R.S. already include protections for the Company's other customers. If Ebon fails to interrupt, it is charged for a portion of the DRS demand discount. If it fails to curtail on multiple events, the entire DRS demand discount is clawed back and they would effectively be charged firm Tariff I.G.S. rates from that point forward. *See* Kentucky Power Tariff Sheet No. 36-3, Rider D.R.S.[2]

Q. PLEASE SUMMARIZE MR. BARON'S POSITION WITH RESPECT TO THE RIDER D.R.S. PORTION OF THE SPECIAL CONTRACT.

A. Mr. Baron generally raised concerns with the Company's ability to successfully call for interruption events under Rider D.R.S. and the hypothetical associated consequences.

Q. SINCE THE INCEPTION OF RIDER D.R.S., HAS THE COMPANY FAILED TO DECLARE A DISCRETIONARY INTERRUPTION DURING AN ACTUAL PJM 5 HIGHEST CP HOUR IN ANY DELIVERY YEAR?

A. No, as stated in the Company's response to AG-KIUC data request 2-15.

Q. PLEASE SUMMARIZE MR. BARON'S POSITION ON INCREMENTAL GENERATION COSTS.

A. Mr. Baron was critical of the Company's marginal cost analysis and the fact that incremental generation costs for the 25 MW of firm capacity were not included. As stated in the Company's response to KPSC data request 1-9 and AG-KIUC data request 1-9, the

[2] https://psc.ky.gov/tariffs/Electric/Kentucky%20Power%20Company/Tariff.pdf

Company must purchase capacity to serve all of its customers after the expiration of the Rockport UPA. All customers pay for incremental generation cost and capacity costs are not assigned to individual customers based on their share of incremental generation required to serve them. It would not be fair, just, or reasonable for the Company to impose such a requirement on a customer.

Q. GIVEN THAT IT WOULD NOT BE IDEAL FOR EBON TO TAKE SERVICE SOLELY UNDER TARIFF I.G.S., WHICH THEY ARE ENTITLED TO DO, AND WHICH WOULD CAUSE INCREMENTAL COSTS FOR ALL CUSTOMERS, IN YOUR OPINION, WHAT IS THE ONLY ISSUE THAT SHOULD BE CONSIDERED HERE?

A. The only issue that should be considered here is the discount offered in the Special Contract. It is a fact that if Ebon, or any large customer load, elected to take service under Tariff I.G.S., the Company has an obligation to serve them and there could be incremental costs borne by all of the Company's customers in that event. This, plus the economic development benefits to the service territory, is the impetus for offering a special contract for a load of this size with provisions for interruption as well as certain discounts to standard tariff rates. Company Witness Clark discusses the importance of the Company's economic development efforts in relation to this project, which explains the basis for the discounts offered in the Special Contract being modeled after those available under Tariff E.D.R.

Q. DOES THE SPECIAL CONTRACT OFFER FAIR, JUST, AND REASONABLE RATES TO EBON AND PROVIDE ADEQUATE PROTECTIONS FOR THE COMPANY AND OTHER CUSTOMERS?

A. Yes. According to Ebon, the cost of electricity was a deciding factor in choosing to locate in the Company's service territory. Company Witness Clark discusses this further in her rebuttal testimony. Given this, some form of discount to standard Tariff I.G.S. and Rider D.R.S. rates was appropriate. The Company worked with Ebon to design the Special Contract, which includes the ability to interrupt their operations per the terms of Rider D.R.S. In addition, and as mentioned previously, Rider D.R.S. provides certain protections against non-performance during an interruption event.

The Company further negotiated as part of the Special Contract the use of a floor price as a protection for all customers in the event that resulting rates were not sufficient to ensure recovery of the Company's variable costs and make a contribution to fixed costs. While I am not an attorney, it is my understanding that the Commission has approved special contracts for large industrial customers in the past, in part, based on the unique competitive circumstances for the customers and a finding that the rates in the special contract would cover any variable costs associated with the customer's service and a portion of the utility's fixed costs.[3] The Special Contract proposed here meets this criteria and also enables significant economic development benefits for the local area. Moreover, the use of the floor price and the other protections contemplated by the Special Contract ensure that Ebon is not unreasonably favored or advantaged over Kentucky Power's other customers.

Finally, in the Company's response to Joint Intervenors' data request 1-35, the Company explained the legal remedies available in the event of a failure on Ebon's part

[3] *See* Order, *In The Matter Of: Filing Of Special Industrial Contracts By Atmos Energy Corporation*, Case No. 2017-00035 (Ky. P.S.C. April 12, 2017); Order at 9 fn. 36, *In The Matter Of: Electronic Application Of Duke Energy Kentucky, Inc. For Approval Of A Special Contract And For Waiver Of 807 KAR 5:041, Section 6(2)(C)*, Case No. 2021-00192 (Ky. P.S.C. March 4, 2022).

to fulfill its obligation under the Special Contract. The Special Contract provides fair, just, and reasonable rates to Ebon, protects other customers, and should be approved as filed.

Q. WOULD IT BE IMPRUDENT TO DENY THE SPECIAL CONTRACT AS RECOMMENDED BY MR. BARON?

A. Yes. The Special Contract provides fair, just, and reasonable rates, plus the appropriate protections for other customers, to allow Ebon to locate in the Company's service territory and bring desperately needed jobs and other economic development to the area. Company Witness Clark discusses in her rebuttal testimony the economic impacts expected to result from this important project and how these significant benefits could be erased if the Special Contract is not approved.

IV. JOINT INTERVENORS CONCERNS - TARIFF E.D.R.

Q. DID THE COMPANY FILE THE SPECIAL CONTRACT SEEKING APPROVAL UNDER TARIFF E.D.R.?

A. No, and it should not be subject to evaluation based on the Order in Administrative Case No. 327 as argued by Ms. Sherwood. The Special Contract includes discounts similar to Tariff E.D.R. but was not filed for approval under the Company's Tariff E.D.R. The Special Contract should thus be considered as any other special contract would.

Q. DOES TARIFF E.D.R. HAVE A CAPACITY CAP?

A. Yes, the amount of allowable MW under Tariff E.D.R. is capped at 250. With Ebon's expected load of 250 MW, and 39 MW already subscribed, only 211 MW remains available. If the remainder of the available MW were assigned to Ebon, it would limit their possible discounts as well as leave Tariff E.D.R. totally subscribed with no opportunity for future prospective customers with smaller loads to participate.

V. JOINT INTERVENORS CONCERNS – LOAD FORECAST

Q. WITNESS HOTALING STATED THAT THE COMPANY PROVIDED THREE FORECASTS IN DISCOVERY, IS THIS CORRECT?

A. Yes. Witness Hotaling also testified that it was unclear whether those forecasts include the Ebon load. I am providing further information and clarity on that issue.

Q. PLEASE DESCRIBE EACH FORECAST.

A. Filed in response to KPSC data request 1-4, PublicAttachment1, the Company provided its load forecast that was completed in June 2022 and is being used in the Company's forthcoming Integrated Resource Plan ("IRP") to be filed on or before March 20, 2023. On the tab "Forecast Peaks," you will see the seasonal peak demand forecasts used for modeling purposes in the Company's forthcoming IRP. This forecast accounts for the addition of Ebon as a customer of Kentucky Power. I will refer to this forecast as the "June 2022 IRP Load Forecast."

Filed in response to KPSC data request 1-4, Attachment2, the Company provided its latest forecast, which was completed after modeling efforts for the Company's forthcoming IRP were initiated. This forecast accounts for the addition of Ebon as a customer of Kentucky Power. I will refer to this forecast as the "Post-IRP Updated Load Forecast."

Filed in response to KPSC data request 1-4, Attachment3, the Company provided a load forecast obligation utilized for PJM planning purposes (see Row 14, Estimated

Load Obligation). This forecast *does and does not* account for the addition of Ebon as a customer of Kentucky Power. I will refer to this forecast as the "PJM Planning Load Obligation Forecast." I explain further below.

Q. HOW WAS THE PJM PLANNING LOAD OBLIGATION FORECAST DEVELOPED?

A. For PJM Delivery Year ("DY") 2022/23 through DY 2026/27, the Company used the typical planning parameters set forth by PJM. Those planning parameters are not Kentucky specific and do not include Ebon. In order to reflect a more Kentucky-specific forecast, for DY 2027/28 through DY 2031/32, the Company mimicked the PJM planning parameters, and instead used the Company's load forecast for peak demand, which includes Ebon.

Q. IS EBON'S LOAD INCLUDED IN THIS FORECAST?

A. Yes and no. For DY 2026/27, Ebon is not reflected. However, for DY 2027/28 through DY 2031/32, Ebon is reflected because it is included in the Company's load that is diversified to be coincident with the PJM summer peak demand.

Q. WHY DO THE PJM PLANNING PARAMETERS NOT ACCOUNT FOR EBON?

A. The demand growth rates for Load Serving Entities ("LSE") in the AEP Zone are determined by the PJM Load Forecast for the AEP Zone. The 2022 PJM Load Forecast did not include a load addition for Ebon.

Q. IF PJM HAD INCLUDED A LOAD ADDITION FOR EBON, WHAT EFFECT WOULD THERE BE ON THE LOAD PROJECTION FOR KENTUCKY POWER USING PJM PLANNING PARAMETERS?

A. All LSEs in the AEP Zone are assumed to grow at the same rate. Kentucky Power's Peak Load Contribution ("PLC") was roughly 4.2% of the AEP Zone for 2022 PLC. If 250 MW were added to the AEP Zone forecast by PJM, Kentucky Power would see an increment of its load by 10.5 MW or 4.2% of the 250 MW load addition. Incidentally, this is smaller than the loads of Vanceburg and Olive Hill combined, the Company's wholesale customers. Vanceburg and Olive Hill have indicated their desire to submit a request for proposal for bid and will not be part of the Company's planning beginning June 2025.

Q. WHEN WOULD KENTUCKY POWER'S LOAD IN PJM EXHIBIT THE TOTAL EBON LOAD?

A. If Ebon is fully operational in 2024, then its load would be accounted for in Kentucky Power's load in 2025 PLC. The amount of Ebon load in that PLC will be dependent on Ebon's load at the time of PJM's five coincident peaks.

VI. JOINT INTERVENORS CONCERNS – VARIOUS ISSUES

Q. AT PAGE 19, MS. SHERWOOD REFERENCES SECTION 3.3 OF THE SPECIAL CONTRACT. IS HER SUMMATION OF THAT SECTION CORRECT?

A. No, it is not. Ms. Sherwood states, "Per Section 3.3, Ebon can increase or decrease the Total Capacity Reservation by providing written notice to the KPCO one year in advance." Section 3.3 of the Special Contract actually states,

> The Customer's Metered Demand shall not exceed, and the Company shall not be required to supply capacity in excess of, one hundred twenty percent (120%) of the Total Capacity Reservation, except by mutual written agreement of the Parties.

This section is merely intended to limit Ebon's ability to run its operations at greater than 120% of its Total Capacity Reservation as well as make clear the Company shall not be required to supply that excess capacity. It does not give Ebon a blank check to increase or decrease its Total Capacity Reservation simply by providing written notice.

Ms. Sherwood makes further recommendations at page 20 that certain conditions be added to the Special Contract negating it if Ebon indicates it will decrease its Total Capacity Reservation below 80 MW after 12 months or 250 MW after 24 months. This recommendation should be disregarded as there are adequate protections included in Section 5.5 of the Special Contract:

> Customer acknowledges that the rates under this Contract are contingent upon Customer achieving and maintaining thereafter an average on-peak monthly demand of 250 MW no later than the later of June 2024 or twenty-four (24) months after the effective date of this Contract. In the event, beginning 12 months after the effective date of this Contract, Customer's average on-peak monthly demand, calculated on a calendar month basis, is less than 25 MW, the standard rates, billing, and payment provisions of Tariff I.G.S. shall apply to that month's billing. The Customer's average on-peak monthly demand, calculated on a calendar month basis, will be calculated based on the most recent available billing data prior to the billing month.

Q. AT PAGE 20, MS. SHERWOOD REFERENCES SECTION 5.5 OF THE SPECIAL CONTRACT, SPECIFICALLY THE 25 MW REQUIREMENT. CAN YOU EXPLAIN HOW THIS AMOUNT WAS SET?

A. Yes. The 25 MW amount was determined in discussions with Ebon regarding the Company, or Ebon, providing capital spares or mobile stations in order for Ebon to begin operations prior to the completion of their substation. A common size for a mobile station is 30 MW. Further, most operations take time to ramp up to full capacity, so the 25 MW was also looked at as a beginning ramp period for Ebon's operations.

Q. SHOULD MS. SHERWOOD'S RECOMMENDATION BE ADOPTED?

A. No. As explained, the 25 MW threshold is reasonable and will allow Ebon to begin operations under the Special Contract ramping up to full capacity no later than the later of June 2024 or 24 months after the effective date of the Special Contract.

Q. AT PAGES 13-16 OF MS. HOTALING'S TESTIMONY, SHE DISCUSSES THE FLOOR PRICE MECHANISM. DO YOU HAVE ANY COMMENTS?

A. Yes. The floor price mechanism was negotiated with Ebon and developed to raise the realized rate to more acceptable levels over the 10-year contract. In addition, it provides a mechanism to keep Ebon's rates more consistent over time by banking credits for periods where energy costs are low and realized rates are lower than the floor price for time periods when the reverse is true.[4] The floor price mechanism provides protection for other customers and for the Company in that Ebon will pay for marginal costs and make a contribution to fixed costs, benefiting all customers. Ms. Hotaling provides no evidence or analysis showing that the floor price mechanism is inappropriate or that it will result in Ebon not being billed at the Minimum Bill amount. Ms. Hotaling's unsupported argument should be rejected.

Q. AT PAGES 19-21 OF MS. HOTALING'S TESTIMONY, THE DEMAND REDUCTION INDUCED PRICE EFFECTS ("DRIPE") IS DISCUSSED. DO YOU AGREE WITH HER CONCLUSION?

A. No, I do not. Ms. Hotaling presents no evidence of DRIPE in a reverse scenario, meaning that additional load could result in market price increases. Simply saying that "it seems possible" is not evidence. The addition of load, by itself alone, has little to do with the

---

[4] See the Company's response to KPSC data request 1-11.

realized market price for energy. PJM market prices are highly correlated with natural gas prices because generally speaking, the marginal unit that sets the system energy price in PJM are natural gas-fired generating units. When gas prices rise, PJM energy prices also rise. Some things that may cause gas prices to rise are weather forecasts that indicate a potential rise in the need for heating or electricity demand, a downward trend of natural gas storage compared to prior periods for the supply of the overall market, flat or declining natural gas production, and robust demand for natural gas in the global markets. Ms. Hotaling's conclusion is flawed and should be ignored.

VII. CONCLUSION

Q. PLEASE SUMMARIZE YOUR CONCLUSION.

A. The Special Contract provides fair, just, and reasonable rates for Ebon, an important customer and load addition for Kentucky Power. The rates proposed in the Special Contract do not unreasonably favor or advantage Ebon as compared to other customers. Moreover, as Company Witness Clark explains in her testimony, attracting industrial customers to Eastern Kentucky is not easy and the Special Contract will bring this project one step closer to reality. Absent its approval, this project likely will never become a reality. Increased load will help reduce costs for all customers by spreading fixed costs over a larger denominator. Company Witness Clark also details the other significant economic benefits that this customer will bring to Eastern Kentucky. There are also certain ancillary benefits to the Company of the increased revenues helping to improve ROE and stabilize financial metrics. Communities also benefit from a financially strong utility. In addition, the Company has an obligation to serve Ebon and it is no one's best interest to have Ebon take service under firm Tariff I.G.S. rates, as explained in my testimony. For all of these reasons, and the reasons included in Company Witness Clark's testimony, the Special Contract should be approved as filed.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.

Kentucky Power Company
Annual Internal Load
2023-2034

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Internal Energy (GWH)												
Residential	1,959	1,929	1,909	1,890	1,873	1,862	1,848	1,832	1,821	1,810	1,800	1,791
Commercial	1,460	1,897	1,894	1,890	1,884	1,881	1,877	1,873	1,869	1,865	1,862	1,859
Total Industrial	2,076	2,072	2,062	2,052	2,042	2,037	2,035	2,034	2,034	2,031	2,028	2,026
Total Other Ultimate	9	9	9	9	9	9	9	9	9	9	9	9
Total Ultimate Sales	5,504	5,908	5,875	5,842	5,809	5,790	5,770	5,749	5,733	5,716	5,699	5,685
Other Sales-for-Resale	78	77	33	0	0	0	0	0	0	0	0	0
Total Sales-for-Resale	78	77	33	0	0	0	0	0	0	0	0	0
Total Internal Sales	5,581	5,985	5,907	5,842	5,809	5,790	5,770	5,749	5,733	5,716	5,699	5,685
Total Losses	412	463	503	457	459	452	453	451	449	448	446	445
Total Internal Energy	5,994	6,448	6,410	6,298	6,268	6,242	6,223	6,200	6,182	6,164	6,145	6,130
Internal Peak Demand (MW)												
Summer	1,011	1,092	1,089	1,069	1,065	1,059	1,056	1,053	1,050	1,046	1,046	1,042
Preceding Winter	1,282	1,342	1,336	1,309	1,301	1,289	1,285	1,277	1,271	1,261	1,260	1,253

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 testimony 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. 2022-00387
County of Boyd)

Subscribed and sworn before me, a Notary Public, by Brian K. West this 14th day of March, 2023.

Scott E. Bishop
Notary Public

SCOTT E. BISHOP
Notary Public
Commonwealth of Kentucky
Commission Number KYNP32110
My Commission Expires Jun 24, 2025

My Commission Expires June 24, 2025

Notary ID Number: KYNP 32110