

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_1** Please produce copies of any documents or information that the Company used to determine the pricing included in the Proposed Special Contract, as well as an unredacted version of the Proposed Special Contract itself and the testimony of Brian K. West that the Company submitted in support of the Proposed Special Contract.
- a. Please provide any documents and calculations regarding the “complex billing structure” referenced on page 9 of Mr. West’s testimony.

RESPONSE

The Company is working with counsel for the Joint Intervenors to provide the confidential version of the proposed Special Contract subject to a non-disclosure agreement. No other responsive documents exist.

- a. Please refer to the Company's responses to KPSC 1-11 and 1-12.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_2 Did the Company review any documents or other information from Ebon substantiating the “approximately 50-100 new jobs” that would be created by Proposed Facility, as referenced in the Proposed Special Contract? Please produce copies of any such documents or, in the case of any information that is not in the form of a document, please describe what information was reviewed. If the Company did not review any such documents or information, please explain why not.

RESPONSE

Kentucky Power connected Ebon with Eastern Kentucky Concentrated Employment to handle their hiring needs. See the Company’s response to AG-KIUC 1-19 for specifics about the positions Ebon has committed to hiring as well as pertinent wage data. Additionally, Ebon's projected job numbers fall in line with the projections Kentucky Power has seen for nearly every crypto-related prospect it has engaged with since mid-2021. Standard industry practice generally seems to be one job for every 2 MW of load.

See also the Company’s responses to AG-KIUC 1-19, JI 1-3, JI 1-6 and JI 1-38.

Witness: Amanda C. Clark

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_3** Please refer to the Testimony of Brian K. West, page 10, lines 3-4, which indicates that there will be approximately 100 positions for the “highly technical nature of Ebon’s operations.” Please provide details on the following:
- a. Indicate how many positions are estimated to be remote versus onsite.
 - b. Indicate how many positions will be full time.
 - c. Indicate how many positions are permanent versus temporary.
 - d. Indicate the level of educational and experience required by position type.
 - e. Will the positions be recruited locally?
 - i. If so, indicate how Ebon has determined that there is a pool of qualified local candidates.
 - ii. If so, indicate how many candidates are expected to come from the local community.
 - f. In five years, how many positions are expected to be retained locally at the Proposed Facility.

RESPONSE

Please see the Company’s response to AG-KIUC 1-19 for job descriptions, qualifications, and wage data. The Company has been informed by Ebon that, of the 100 positions for the Ebon project, all jobs will be onsite, full time, and are permanent. The education level and experience will vary based on position type. There will be a number of engineers hired for the facility as well as administrative staff. There will also be facility maintenance technicians and general maintenance workers. Ebon plans to train the maintenance technicians and general maintenance workers. The positions will be recruited locally. Ebon has engaged Eastern Kentucky Concentrated Employment to recruit applicants. Kentucky Power is unaware of the current status of the recruitment as the Company is not involved in its hiring process. However, Ebon has, on numerous occasions, expressed the desire to hire as many local persons as possible. The number of positions at the facility is not projected to decrease in five years.

See also the Company’s responses to AG-KIUC 1-19, JI 1-2, JI 1-6 and JI 1-38.

Witness: Amanda C. Clark

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_4 Did the Company review any documents or other information from Ebon substantiating the \$250 million in anticipated investment in the Proposed Facility that is referenced in the Proposed Special Contract and the testimony of Brian K. West submitted in support of the Proposed Special Contract? Please produce copies of any such documents or, in the case of any information that is not in the form of a document, please describe what information was reviewed. If the Company did not review any such documents or information, please explain why not.

RESPONSE

See KPCO_R_JI_1_4_Attachment1 for an executed Letter of Agreement with Ebon regarding the project at the Big Sandy site. See also the Company's response to AG-KIUC 1-20.

Witness: Amanda C. Clark

LETTER OF INTENT

August 10, 2021

Mr. Brett Mattison
President and Chief Operating Officer
Kentucky Power
1645 Winchester Avenue
Ashland, KY 41101

Dear Brett Mattison,

This letter of intent (the "Letter") serves to summarize the principal terms of the potential association between EBON INTERNATIONAL LLC, a New Jersey registered company ("Ebang") and Kentucky Power, a Kentucky registered company ("Kentucky Power") together with Ebang (the "Parties") for the development of high-capacity centers for hosting power intensive computing infrastructure (the "Project") and to set forth certain understandings between the Parties.

This letter of Intent contemplates that the Parties will mutually collaborate to negotiate a definitive agreement to agree to the terms in building out the computing centers and the allotment of computing hardware capacity and deployment schedule by Ebang for placement at the agreed upon sites.

This Letter is intended to define a framework for discussion and is not intended to be construed as a binding agreement, except as otherwise expressly set forth herein and simply memorializes the preliminary understandings for discussions in developing a Definite Agreement between the Parties, as soon as possible, but no later than **30th of September, 2021**.

SUMMARY OF PRINCIPAL TERMS

The following is a summary of the principal terms of the Project:

1. Intended Project

Ebang has **250 MW equivalent** of high-capacity computing hardware that can be deployed across one or more locations capable of meeting its environmental, energy, connectivity, security, and maintenance needs.

Kentucky Power has access to site(s) that can meet the specific requirements of Ebang and will build and prepare the site to fulfill the technical and operational requirements of Ebang to deploy the committed hardware.

2. Partnership Agreement

The Parties intend to immediately begin negotiating to reach a written definitive agreement that will define the terms and conditions of their agreement of the Project(s), including:

- (a) Total aggregate of 250MW of capacity
- (b) Agreement on competitive electricity price
- (c) Agreement on land capacity requirements
- (d) Agreement on land lease pricing
- (e) Finalize the quantity and price and any/all financial requirements of the Agreement.
- (f) Finalize the logistics, permitting/registration, and timeline of the Agreement.

3. Termination

This letter will automatically terminate and be of no further force and effect upon the earlier of (i) execution of the Definitive Agreement, (ii) mutual agreement of Ebang and Kentucky Power, and (iii) 5.00 p.m. Kentucky time on **30th of September, 2021**. Notwithstanding anything in the previous sentence, paragraphs 4, 5, and 6 shall survive the termination of this Letter and the termination of this Letter shall not affect any rights any Party has with respect to the breach of this Letter by another Party prior to such termination.

4. Governing Law

This letter shall be governed by and construed in accordance with internal laws of the state of Kentucky, without giving effect to any choice or conflict of law provision or rule (whether of the state of Kentucky or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the state of Kentucky.

5. Confidentiality

The parties agree to keep their negotiations and terms and conditions strictly confidential.

6. Expenses

Each Party shall bear its own fees and expenses in connection with the negotiation of the partnership agreement.

7. No Third-Party Beneficiaries.

Except as specifically set forth or referred to herein, nothing herein is intended or shall be construed to confer upon any person or entity other than the Parties and their successors or assigns, any rights or remedies under or by reason of this Letter.

8. No Binding Agreement.

This Letter reflects the intention of the Parties, but for the avoidance of doubt neither this Letter nor its acceptance shall give rise to any legally binding or enforceable obligation on any Party, except with regard to paragraphs 3 through 9 hereof. No contract or agreement providing for any transaction involving Ebang shall be deemed to exist between Ebang and

Kentucky Power unless and until a final definitive agreement has been executed and delivered.

9. Miscellaneous

This Letter may be executed in counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one agreement. The headings of the various sections of this Letter have been inserted for reference only and shall not be deemed to be a part of this Letter.

If you agree that the foregoing reflects the principal terms and condition of our understanding, please acknowledge such agreement in the space provided below.

The terms and conditions set forth herein supersede and replace in their entirety all prior communications between the Parties with respect to the subject matter thereof.

Sincerely,

[The remainder of the page has been intentionally left blank. Signature page follows]

Received and accepted on 8/10/2021.



Kentucky Power

Name: Brett Mattison, President and COO

Received and accepted on 8/10/2021.



EBON INTERNATIONAL LLC

Name: Qiang Wang, CEO

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_5 Please produce copies of any documents in the Company's possession concerning the size, location, and/or the design of the Proposed Facility, including which cryptocurrencies will be mined and which other services will be provided by the Proposed Facility.

RESPONSE

See the Direct Testimony of Company Witness West at page 6, lines 9-13. Also see the Company's response to KPSC 1_3(a), AG-KIUC 1-20 and JI 1-8. The Company does not have any other responsive documents in its possession.

Witness: Amanda C. Clark

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_6** Please produce copies of any documents in the Company's possession, other than those produced in response to previous data requests, concerning the potential economic development benefits of the Proposed Facility.
- a. Please also provide a breakout of the level of economic development anticipated from Phase I and Phase II, independently.
 - b. Please detail the level of investment for the Ebon Project, including a breakdown of the investment by construction materials and buildings fixture versus equipment.

RESPONSE

The Company does not have any other responsive documents in its possession.

a. The economic development benefits of the Ebon project are many. First, the jobs are much needed in Lawrence County and the surrounding counties. See the Direct Testimony of Company Witness West at page 4, lines 7-21. Ebon will provide training for the general maintenance worker positions, making the positions attractive to those who are currently unskilled in that area. Ebon also plans to hire electrical and network engineers as well as professional staff and is working with Eastern Kentucky Concentrated Employment (EKCEP) to recruit those positions. Additionally, by locating this type of project on land that could not be used otherwise, Kentucky Power is not committing a site that could be used for traditional manufacturing. An added benefit will come in the form of school tax to Lawrence County Schools. School tax is not exempt in the incentives offered by the Commonwealth. Based on Ebon's estimated bill, Lawrence County Schools could receive \$10,643,400 over the life of the contract.

Please see KPCO_R_JI_1_6_Attachment1 for additional details regarding the estimated economic development benefit based on estimated payroll.

b. See the Company's response to AG-KIUC 1-20.

See also the Company's responses to AG-KIUC 1-19, JI 1-2, JI 1-3, and JI 1-38.

Witness: Amanda C. Clark

Position	Number of Jobs	Average Salary	Payroll Phase I	Phase I only	Phase II	Payroll Phase II
Project Manager	2	\$72,131.00	\$144,262.00 *			\$ 144,262.00
Business Development Manager	2	\$120,130.00	\$240,260.00 *			\$ 240,260.00
Busisness Development Associate	2	\$61,570.00	\$123,140.00 *			\$ 123,140.00
HR	1	\$89,707.00	\$89,707.00 *			\$ 89,707.00
Finance Manager	1	\$100,449.00	\$100,449.00 *			\$ 100,449.00
Electrical Engineer	4	\$88,230.00	\$352,920.00		4	\$ 705,840.00
Network Engineer	2	\$74,342.00	\$148,684.00		2	\$ 297,368.00
Warehouse Supervisor	2	\$59,437.00	\$118,874.00 *			\$ 118,874.00
Facilities Engineer	2	\$60,744.00	\$121,488.00 *			\$ 121,488.00
Facilities Technician	5	\$37,518.00	\$187,590.00		5	\$ 375,180.00
General Maintenance Worker	30	\$37,518.00	\$1,125,540.00		45	\$ 2,813,850.00
Security Guard	4	\$29,120.00	\$116,480.00		2	\$ 174,720.00
	57	\$830,896.00	\$2,869,394.00		115	\$ 5,305,138.00

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_7 Please produce copies of any documents in the Company's possession concerning applications for permits to construct the Proposed Facility, or permits issued, including but not limited to any permit applications to or permits issued by the Kentucky Energy & Environment Cabinet or any of its departments or divisions.

RESPONSE

Kentucky Power has no such documents in its possession.

Witness: Amanda C. Clark

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_8** Please produce copies of any documents in the Company's possession concerning the 55-acre land lease between Ebon and the Company for the Proposed Facility and any accompanying facilities, including any documents concerning potential government tax revenue estimates and estimated property tax increases or decreases. Include any discounts that Ebon or KPCO is projected to receive related to taxes and other grants because of locating the Proposed Facility in KPCO's service territory.
- a. Please describe in detail the terms under which Ebon will compensate the Company for leasing 55 acres of land and produce any documents in the Company's possession reflecting those terms.
 - b. Provide a good faith tax estimate to be recognized by the local government because of the Proposed Facility. Please explain in detail how building improvements on KPCO's land will impact local tax revenues and clarify if there is an increased tax payment whether it will be paid for by KPCO or from Ebon.
 - c. Please describe in detail how any compensation received by the Company for leasing land to Ebon will be accounted for by the Company, including whether that compensation will be put toward reducing the costs for the Company's other customers. Please produce copies of any documents in the Company's possession concerning this issue.

RESPONSE

- a. Please see KPCO_R_JI_1_8_PublicAttachment1 for a copy of the lease. The terms of the lease speak for themselves.
- b. The Company is not aware as to whether an estimated tax assessment has been prepared by the county at this time. Please see the Company's response to JI 1-6 for the estimated school tax impact. Any other impact to local tax revenues is unknown at this time.
- c. The lease is recorded in a Non-Utility Plant account (FERC Account 121) that is excluded from the Kentucky Power retail revenue requirement. The rent would be credited to a FERC Other Income Account and excluded from retail cost of service.

Witness: Amanda C. Clark

This document is redacted in its entirety.

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_9** Please identify any transmission, grid, or infrastructure investments that the Company would incur to provide service to the Proposed Facility. For any such investment identified, please (a) explain in detail the nature of the investment; (b) identify the anticipated capital expenditure required with a breakdown between the investment in construction materials and building versus equipment; (c) identify the timing of the investment; and (d) identify whether the Company anticipates that it will seek to recover the investment from customers, and if so, by what mechanism. If there are no such investments identified, please explain why not.

RESPONSE

- a. Expansion of the 138 kV infrastructure at Big Sandy Station and short line extensions to the new Ebon facility.
- b. Currently estimated at approximately \$4.9 million, including approximately \$1.8 million in materials and approximately \$3.1 million in labor (Engineering/Construction). Note these costs are subject to change as detailed engineering is performed following the execution of a contract with Ebon.
- c. The timing of the investment is dependent upon the timing of the contract execution with Ebon.
- d. No. Based on the current negotiations, Ebon will fund 100% of the transmission infrastructure, so there will be no impact to Kentucky Power Company's transmission/distribution rates.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_10 Please identify any fixed costs other than those provided in response to DR 1.9 that the Company would incur to provide service to the Proposed Facility. For any such fixed cost identified, please (a) explain in detail the nature of the fixed cost; (b) identify the anticipated expenditure(s) required; (c) identify the timing of the expenditure(s); and (d) identify whether the Company anticipates that it will seek to recover the expenditure(s) from customers, and if so, by what mechanism. If there are no such fixed costs identified, please explain why not.

RESPONSE

Kentucky Power is not anticipating to incur any additional fixed costs. The temporary skid/mobile substation will be 100% funded by Ebon and therefore would not be recovered through Kentucky Power transmission/distribution rates. Whether this is needed is still being considered by Ebon, and estimates are still preliminary as engineering details are still being discussed between Kentucky Power and Ebon.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_11 Please identify any transmission, grid, or infrastructure investments that the Company anticipates Ebon will incur in order to take service from the Company. For any such investment identified, please (a) explain in detail the nature of the investment; (b) identify the anticipated capital expenditure required; and (c) identify the anticipated timing of the investment.

RESPONSE

See the Company's response to JI 1-9 and JI 1-10.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_12 Please identify whether the Company anticipates that the Proposed Facility will participate in any demand response programs, either through the Company or PJM. If yes, please identify the program and explain in detail the terms under which the Company anticipates that the Proposed Facility will participate. If no, please explain why not.

RESPONSE

The customer will, per Article 3.2 of the Special Contract, participate in Rider D.R.S. (Demand Response Service). Rider D.R.S. is attached as Exhibit 2 to the proposed Special Contract. The current version of Rider D.R.S. also is available for review on the Commission's website:

<https://psc.ky.gov/tariffs/Electric/Kentucky%20Power%20Company/Tariff.pdf>

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_13 Did the Company have any discussions with Ebon about whether it would construct the Proposed Facility if it did not receive the rates in the Proposed Special Contract? If yes, please describe those discussions and produce copies of any documents reflecting those discussions. If no, please explain why not.

RESPONSE

No. The Special Contract was negotiated by the Company and Ebon in good faith.

Witness: Amanda C. Clark

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_14 Did the Company consider any documents or information concerning the financial health or track record of Ebon, or the potential effects of changing cryptocurrency markets or regulation of cryptocurrencies, when evaluating whether to offer the Proposed Special Contract to Ebon? If yes, please produce copies of any documents in the Company's possession reflecting any documents or information considered. If no, please explain why not.

RESPONSE

Kentucky Power reviewed the financial records of Ebon, which are publicly available through the U.S. Securities and Exchange Commission, for the purposes of determining if the Company would require a security schedule from Ebon to build the upgrades to the Company's station in order to serve Ebon. Because Ebon was required to pay up front for any infrastructure upgrades (which is Kentucky Power's standard practice for crypto-related companies) it was determined by the Company's credit risk department that a security schedule was not required. Kentucky Power did not consider the potential effects of the changing cryptocurrency markets or regulations of cryptocurrencies when evaluating whether to offer the proposed Special Contract to Ebon (regardless, see the Company's response to KPSC 1-3). The calculated bill for the Ebon load under tariffs I.G.S., E.D.R., and D.R.S. produced a realized rate lower than the Company's estimate of the marginal cost to serve the customer (see the Company's response to KPSC 1-12), necessitating consideration for a special contract.

Witness: Amanda C. Clark

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_15** Please refer to Finding 12 on pages 26-27 of the Commission’s September 24, 1990 order in Administrative Case No. 327.
- a. Please identify and explain the “minimum usage level” that is assumed for the Proposed Facility in the Proposed Special Contract.
 - b. Please explain how the applicable level of demand for the discount was calculated. If it was not calculated, please explain why not.

RESPONSE

As an initial matter, the Company is not seeking approval of the Special Contract under the terms of Tariff E.D.R. Nonetheless, the Special Contract rates were modeled after rates that could otherwise be offered under Tariff E.D.R. and Rider D.R.S.

The “Availability of Service” terms for Kentucky Power’s Tariff E.D.R. can be found at Sheet 37-1 of its current tariff and can be viewed on the Commission’s website at:

<https://psc.ky.gov/tariffs/Electric/Kentucky%20Power%20Company/Tariff.pdf>.

Ebon represented to Kentucky Power that it anticipated that its “monthly maximum billing demand” under the terms of the Special Contract “will equal or exceed 100,000 kW (100 MW) by June 2024.” See proposed Special Contract at 2.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_16 Please identify any provisions in the Proposed Special Contract that protect the Company's existing customers from the risk that Ebon will default or otherwise not complete the initial term of the contract. For any such provisions identified, please explain how they protect the Company's existing customers from risk, particularly in the event of a default, bankruptcy, or disappearance by the customer.

RESPONSE

The terms of the Special Contract speak for themselves. Also, see the Company's response to JI 1-17 and 1-35.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_17 Has the Company had any communications with Ebon concerning the possibility of it providing some form of security or collateral to protect against risk, or any guarantees concerning the Proposed Facility's minimum level of load or completion of the 10-year contract term? If yes, please describe those communications and produce copies of any documents reflecting those communications. If no, please explain why not.

RESPONSE

See the Company's response to KPSC 1-3(b) and JI 1-35.

Ebon also will be required to provide a security deposit equal to 2/12ths of its estimated bill prior to taking service. In addition, Ebon is financially responsible for all improvements up front. The contribution-in-aid of construction ("CIAC") amount will be refunded to Ebon in years 6-10 of the contract on a monthly basis subject to conditions.

Witness: Amanda C. Clark

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_18** Does the Company have internal criteria or an internal process for determining which new or existing customers are eligible to receive special contracts under its Economic Development Rider?
- a. If yes, please produce copies of any documents reflecting such internal criteria or process, and please describe how such internal criteria or process were applied to Ebon.
 - b. If no, please explain why not.
 - c. Please provide any information regarding the Company's reasons for filing the Proposed Contract outside of its existing Economic Development Rider Tariff.

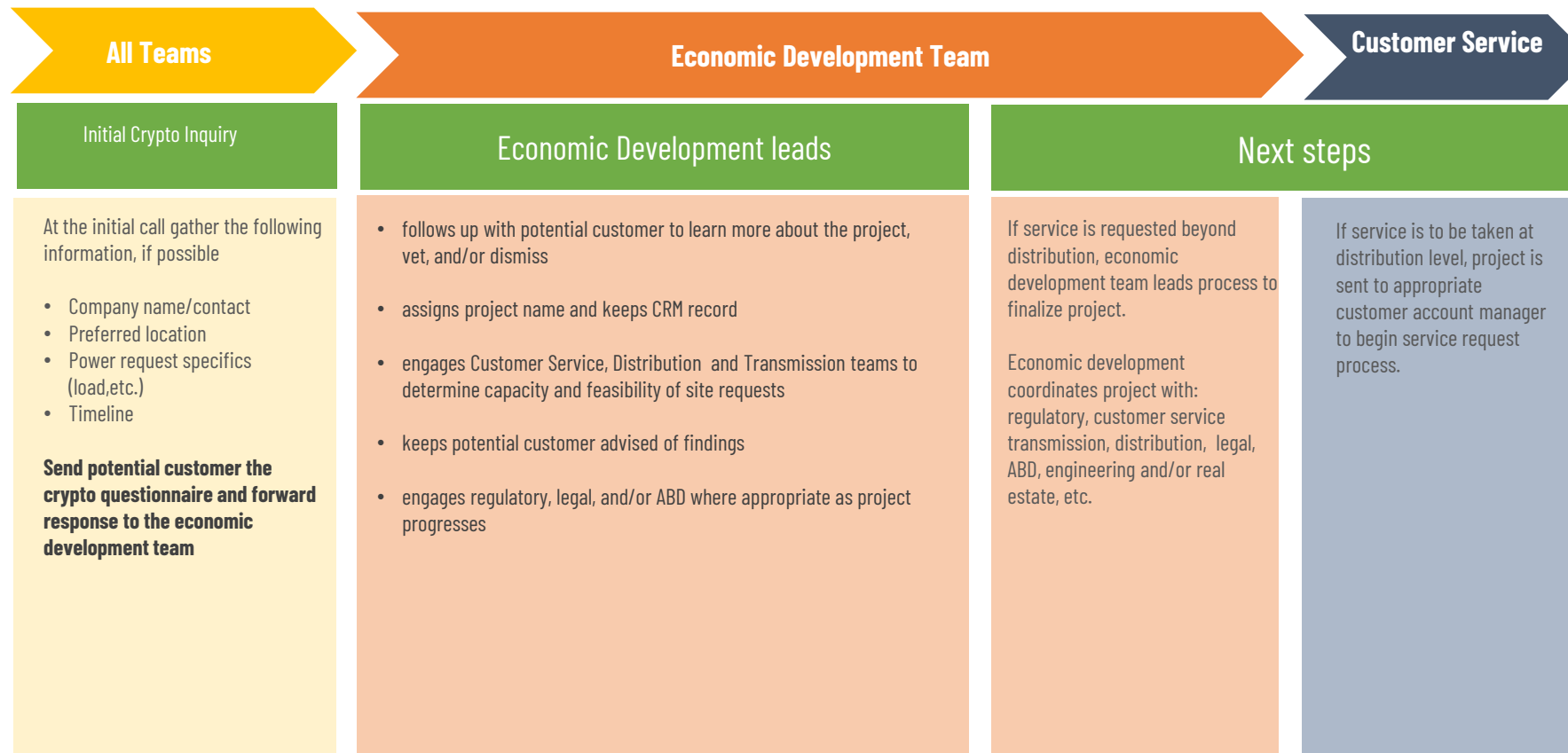
RESPONSE

As an initial matter, the Company is not seeking approval of the Special Contract under the terms of Tariff E.D.R. Nonetheless, the Special Contract rates were modeled after rates that could otherwise be offered under Tariff E.D.R. and Rider D.R.S.

- a. b. Please see KPCO_R_JI_1_18_Attachment1 and KPCO_R_JI_1_18_Attachment2 for Kentucky Power's process for working with potential cryptocurrency-related projects. Of over 100 potential cryptocurrency-related projects brought to Kentucky Power, only four have been considered for Tariff E.D.R. The criteria, in general, for determining if a potential cryptocurrency-related project is a candidate for Tariff E.D.R. are size of load and the customer's commitment to sign a 10-year contract. Please see KPCO_R_JI_1_18_Attachment3 for a copy of the Company's current Tariff E.D.R. Application.
- c. See the Direct Testimony of Company Witness West at page 11, lines 9-14.

Witness: Amanda C. Clark

Kentucky Power Crypto Project Process





Economic Development Questionnaire

- Company Name (the entity who will own the assets)?
 - Formation Structure, i.e., legal formation type and state of formation?
 - Entities legal board members/ owners?
 - Years of existence?
- Number of Current Facilities
 - Location of Current Facilities?
 - How long in operation?
 - Size of Current Facilities?
- Planned Capital Investment
 - Funding Sources?
- Planned Net New Jobs?
- Required Timeline for service?
 - What do you need to start?
 - What is the end goal for capacity?
- Do you have a site plan already developed?
 - Potential site
 - What will be the size of the building/s? Acreage needed?
 - Any other site requirements that will help us narrow our search?
- Panel schedule or electrical plans for operation?
- Is there a preference for renewables/green power?
 - Please indicated level of priority (Strong, Medium, Low, N/A)
 - Are you interested in renewables even if it comes at a premium?
 - Explain any specific clean energy needs/wants if known
- Financial background review
 - Communities will require at least two years of audited financials (or other similar financial review). If these have been developed, this helps expedite any necessary approval process.
 - Note, AEP also completes a credit check and has a financial due diligence process/requirement.
- Any other relevant information you think is important to share with us at this time?

Kentucky Power Co. Application for Economic Development Rider Discount

The following information requested is necessary to apply for the incremental and/or supplemental billing demand discounts provided under the Economic Development Rider (Tariff E.D.R.). Please email the completed and verified application to klborders@aep.com.

Customer Name: _____

Address: _____

Contact Name: _____

Phone: _____

Email: _____

In order for the Company to determine whether the Customer is eligible for service under Tariff E.D.R., please provide the following information required by the Tariff:

1. A description and good faith estimate of the new or increased load to be served during each year of the contract.

2. The number of new employees or jobs that will be added as a result of the new load.

3. A description of the anticipated capital investment.

4. A description of all other federal, state or local economic development tax incentives, grants, or any other incentives / assistance associated with the new or expanded project.

5. A statement that without the EDR discount, the customer would locate elsewhere or choose not to expand within Kentucky Power's service territory.

6. Any additional information that the Customer believes is relevant to demonstrate the Customer's eligibility for the requested billing demand discount(s).

VERIFICATION

STATE OF _____)

) ss:

COUNTY OF _____)

_____, being duly cautioned and sworn, states that the information provided herein is true and accurate to the best of his/her knowledge, information, and belief.

Subscribed and sworn to before me, a Notary Public, in and for said County and State this ___ day of _____, 2022.

Notary Public

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_19 Has the Company attempted to quantify any projected benefits to existing customers from the Proposed Special Contract, in the form of reductions in fixed costs or otherwise? If yes, please provide that quantification and produce copies of any workpapers, with all formulas and links intact, supporting that quantification. If no, please explain why not.

RESPONSE

Please see the Company's response to KPSC 1-9(e)-(f). Further, on a fundamental level, revenue received from new customers that exceed marginal costs contribute to the Company's existing fixed costs that otherwise would have been paid by existing customers. This translates to lower costs for all customer's as fixed costs are spread over a larger total load.

Witness: Lerah M. Kahn

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_20** Please refer to Testimony of Brian K. West at page 7, lines 13 – 22, for the discussion of the Power Coordination Bridge Agreement.
- a. Please confirm whether the Power Coordination Bridge Agreement between Kentucky Power and the AEP Operating Companies is for capacity only or for capacity and energy.
 - b. Please provide the date that the Power Coordination Bridge Agreement ends.
 - c. Please confirm if the Power Coordination Bridge Agreement will remain in effect under Liberty Utility's purchase of Kentucky Power.
 - d. Please provide information regarding any generation assets from Liberty Utilities that could be utilized to meet Kentucky Power's stated capacity need.

RESPONSE

- a. The Power Coordination Bridge Agreement between Kentucky Power and the AEP Operating Companies is for capacity only.
- b. Capacity provided to Kentucky Power through the Power Coordination Bridge Agreement includes PJM Planning Years 2022/23 and 2023/24.
- c. Yes, the Power Coordination Bridge Agreement between Kentucky Power and the AEP Operating Companies would remain in effect under Liberty Utilities Co. ownership.
- d. It is unknown at this time if any of Liberty's generating assets could be utilized to meet the Company's capacity needs.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_21** Please refer to Testimony of Brian K. West at page 7, lines 13-14. Please provide the following:
- a. The supporting calculations for KPCO's capacity need of 152.4 MW for the 2022/2023 PJM Planning Year and 70.2 MW for the 2023/2024 PJM Planning Year.
 - b. KPCO's projected peak demand for the next ten PJM Planning Years that will occur during the special contract.
 - c. KPCO's projected capacity need for the next ten PJM Planning Years that will occur during the special contract.
 - d. KPCO's forecasted sales for the next ten PJM Planning Years that will occur during the special contract.
 - e. The names of all resources retiring within the next ten PJM Planning Years that will occur during the special contract.
 - f. The name, nameplate MW size, and capacity accreditation for all of KPCO's existing supply side resources.
 - g. Information regarding how KPCO accounts for demand side resources in determining the Company's capacity need.

RESPONSE

a-f. Please see KPCO_R_KPSC_1_4_PublicAttachment1.

g. The Company accounts for demand side resources in alignment with PJM Capacity Market recognition for any MW included as Demand Response MW in its PJM Capacity Plan.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_22** Please refer to Testimony of Brian K. West at page 8, lines 8 – 12, where it states, “Ebon has designated 10 percent of its Total Capacity Reservation as Firm Capacity beginning in year one of the Special Contract, while the remaining 90 percent of its load remains interruptible under Rider D.R.S. (Demand Response Service).” Please provide:
- a. The designation that Ebon has made for the Total Capacity Reservation as Firm Capacity for each of the ten years of the Special Contract.
 - b. All records of the day, time, and duration of the event in which KPCO has called an event under Rider D.R.S.

RESPONSE

- a. Please see Section 3.1 of the Special Contract.
- b. Please see the Company's response to KPSC 1-7(b).

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_23 Please refer to Testimony of Brian K. West at page 8, lines 10-12. Please provide KPCO's reserve margin requirement.

RESPONSE

See the Company's response to AG-KIUC 1-5.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_24 Please refer to Testimony of Brian K. West at page 8, lines 20-22. Please provide the additional incremental costs to purchase capacity after May 31, 2024.

RESPONSE

See the Company's response to KPSC 1-6.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_25 Please refer to Testimony of Brian K. West at page 9, lines 20-22. Please provide Ebon's anticipated coincident peak with KPCO.

RESPONSE

Ebon's coincident peak is not known at this time. Ebon will participate in Rider D.R.S. with a Firm Service Level of 25 MW.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_26** Please refer to Testimony of Brian K. West at page 10, lines 17-18.
- a. Please explain what is meant by a “discretionary interruption event.”
 - b. Please explain if there are restrictions on how many times Ebon can have its load interrupted in a year.

RESPONSE

a. b. Per Sheet 36-1 of Rider D.R.S. (attached as Exhibit 2 to the Special Contract) under Conditions of Service, Paragraph 1:
The Company, in its sole discretion, reserves the right to call for curtailments of the Customer’s interruptible load at any time. Such interruptions shall be designated as “Discretionary Interruptions” and shall not exceed sixty (60) hours of interruption during any Interruption Year. The “Interruption Year” shall be defined as the consecutive twelve (12) month period commencing on June 1 and ending on May 31. Should this Schedule become effective on a date other than June 1, the period from the effective date of this Schedule until the next May 31 after such effective date shall be referred to as the “Initial Partial Interruption Year.” In any Initial Partial Interruption Year, Discretionary Interruptions shall not exceed a number of hours equal to the product of the number of full calendar months during the Initial Partial Interruption Year and the annual interruption hours divided by 12.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_27 Please refer to BKW Exhibit 2. Please provide the supporting workbooks, with all formulas and links intact, used to develop the marginal cost analysis presented.

RESPONSE

Please see KPCO_R_KPSC_1_9_PublicAttachment1 for the requested information.

Witness: Lerah M. Kahn

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_28** Please refer to BKM Exhibit 2.
- a. Please confirm whether the analysis presented in BKM Exhibit 2 includes information for Phase One or Phase Two of the contract.
 - b. Did KPCO perform a cost analysis for the entire ten years of the Special Contract? If yes, please provide the supporting workbooks, with all formulas and links intact, used to develop that analysis. If this analysis was not performed, please explain why.

RESPONSE

- a. On December 28, 2022 the Company filed an ERRATA to BKW-Exhibit 2. Nonetheless, please see KPCO_R_KPSC_1_9_PublicAttachment1 which provides information for both phases.
- b. Please see the Company's response to KPSC 1-9(e)-(f).

Witness: Lerah M. Kahn

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_29** Please refer to BKW Exhibit 2, line 1, which reports the “Annual kWh” calculated for the Marginal energy costs.
- a. Please explain if the Annual kWh reported in line 1 is for Phase One or Phase Two of the contract.
 - b. Please provide Ebon’s annual energy forecast over the ten years of the contract period.
 - c. Please explain if KPCO plans to meet Ebon’s energy requirements through self-generation or market purchases.
 - i. If any analysis was performed by KPCO in support of evaluating how KPCO can meet the energy requirements from Ebon, please provide the supporting workpapers for that analysis.

RESPONSE

- a. On December 28, 2022 the Company filed an ERRATA to BKW-Exhibit2. Nonetheless, please see KPCO_R_KPSC_1_9_PublicAttachment1 which provides annual kWh for both phases.
- b. Phase 1 is expected to last approximately one year and require approximately 80 MW. Phase 2 is expected to be years two to ten and require 250 MW each year.
- c. Kentucky Power will acquire the capacity to serve the Ebon Facility through the Bridge Power Coordination Bridge Agreement. That capacity will be priced and provided at the same price and conditions as the capacity acquired to serve the Company’s existing customers. Purchased capacity will be less costly than that previously provided under the Rockport Unit Power Agreement.

PJM Planning Year	\$/MW/Day
2022/2023	\$ 50.00
2023/2024	\$ 34.13
2024/2025	\$ 54.00

- i. No such analysis has been performed.

Witness: Brian K. West (subparts b and c)

Witness: Lerah M. Kahn (subpart a)

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_30** Please refer to BKW Exhibit 2, line 2, which reports the “DA LMP \$/kWh” calculated for the Marginal energy costs.
- a. Please provide the source of the DA LMP \$/kWh assumption used to calculate the marginal energy costs.
 - i. If a market price forecast was used, please provide the market price forecast, at the granularity available, i. e., hourly or monthly, used to develop the number reported in line 2.
 - ii. If a market price forecast was not used, please provide the supporting calculations for the DA LMP \$/kWh reported in line 2.

RESPONSE

a.(i.-ii.) Please see KPCO_R_KPSC_1_9_PublicAttachment1 for the requested information.

Witness: Lerah M. Kahn

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_31** Please refer to BKW Exhibit 2, line 9, which reports the “PJM LSE Transmission.”
- a. Please explain if these costs are related to transmission upgrades to provide interconnection for the Ebon facility. If not, explain what costs are included in “PJM LSE Transmission.”

RESPONSE

Please see the Company’s response to KPSC 1-9(b).

Witness: Lerah M. Kahn

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_32 Please provide details on when KPCO and Ebon began discussions to locate its facilities within KPCO's service territory.

RESPONSE

Kentucky Power and Ebon began discussions to locate its facility within the Company's service territory in mid-July 2021. After the passage of HB230 in 2021, designed to recruit crypto and data centers to Kentucky, Kentucky Power began receiving multiple requests from crypto companies looking for project sites. Many of the requests were sizeable and Kentucky Power found itself in need of identifying properties that could support the industry. The Company determined there were several abandoned coal mine sites with stranded assets that would be ideal for crypto projects. It also considered the 80 acres that formerly housed the coal-fired plant at Kentucky Power's Big Sandy Plant. The unit was in the finishing stages of being demolished at the time and the property was deemed by AEP as not suitable for traditional construction.

Ebon was connected to Kentucky Power after Ebon called The Ashland Alliance (a regional economic development organization) seeking site recommendations. Kentucky Power mentioned the Big Sandy Plant site, and Ebon had interest in the site. Ebon visited the site on August 2, 2021 and began discussions with Kentucky Power about the feasibility of locating a 250 MW project on the former Big Sandy Plant site.

Witness: Amanda C. Clark

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_33** Please refer to the Testimony of Brian K. West at page 11, lines 13-14. Detail whether the complex billing calculation referenced here would require KPCO to update its billing system. If the system requires updating, detail
- a. the estimated cost,
 - b. who will be paying for the system updates
 - c. timing of the updates
 - d. benefits to other ratepayers

RESPONSE

The Company expects that any additional logic within its current billing system required to implement Ebon billing would be nominal. Logic for Tariff E.D.R. and Rider D.R.S. has already been developed, which means only the logic for the floor price must be added. However, the floor price mechanism must be triggered to come into play, so the addition of the required logic may never be required. The floor price will be tracked manually. When triggered it will require an equation code, which will need to be created to ensure proper application. Equation codes are typically a nominal cost to implement. Should these costs occur during a test year they would be incorporated into the cost of service.

Witness: Lerah M. Kahn

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_34 Please refer to the Testimony of Brian K. West at page 7, lines 5-8. Please detail the projected level of avoided fixed cost by customer class as a result of Ebon becoming a customer.

RESPONSE

The requested analysis has not been performed.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_35** Please to refer to the Testimony of Brian K. West at page 13, lines 3-5 regarding remedies under Kentucky law. If Ebon were to shut down or move its Proposed Facility prior to the conclusion of the contract, please
- a. Indicate which Kentucky laws the Company is referencing to protect ratepayers.
 - b. Indicate which Kentucky laws the Company is referencing to protect itself.
 - c. Detail the action that the Company would take as a result to recoup the discounts provided to Ebon.

RESPONSE

Company Witness West's testimony is a recognition that Kentucky common law (and Virginia common law prior to 1792; Section 233, Constitution of Kentucky) long has recognized a legal cause of action (now claim) and corresponding remedies for breach of contract and assumpsit. Further, the Uniform Commercial Code (codified at Chapter 355 of the Kentucky Revised Statutes) may provide legal remedies for breach of contract for the sale of electricity. *See generally* Part seven of KRS Chapter 355 for such remedies. A determination of the specific remedies, in the unlikely event of a default, would be made at the time of such default based upon a reasonable inquiry into the facts as they exit at the time of such default, and the applicable existing law at the time of the default or as otherwise warranted by a good faith argument for the modification, extension, or reversal of such existing law.

Beyond the above, Kentucky Power objects to this data request on the grounds that any further identification of the remedies available to the Company in the unlikely event of a default is speculative because they it would be based on facts not currently in existence, and statutory and common law remedies that may be modified, enlarged, repealed, or established between the date of Company Witness West's testimony and the date of any default. The Company further objects to the data request on the ground that the data request calls for legal conclusions, and legal analysis equally available to the Joint Intervenor and their counsel. Any requirement that the Kentucky Power undertake the analysis beyond that stated in the paragraph above is unduly burdensome.

Respondent: Counsel

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_36 Given the change for Ethereum from proof-of-work to proof-of-stake adopted in September 2022, does Ebon expect its level of capacity and energy usage to decline from those provided in its application for a special contract? Please explain why or why not.

RESPONSE

The Company has been informed by Ebon that Ethereum is expected to be a very small portion of Ebon's business and Ebon does not expect its level of capacity and energy usage at the facility to decline as a result.

Witness: Amanda C. Clark

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_37 Please identify whether Ebon would be able to participate in PJM capacity markets and explain why or why not.

RESPONSE

No, Ebon cannot participate in PJM capacity markets. Customers in regulated states do not have direct wholesale market access. Furthermore, the Company is a fixed resource requirement (FRR) entity for the purpose of meeting its PJM capacity obligations.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

1_38 Please quantify the specific benefits that would accrue to KPCO's other customers because of the Proposed Special Contract.

RESPONSE

Please see the Company's response to KPSC 1-9(e)-(f). Further, in general, the Special Contract with Ebon will provide benefits to all of the Company's customers through increased load which will lower fixed costs borne by all customers. In addition, Ebon will be participating in Rider D.R.S. which is a peak-shaving product designed to avoid higher costs for energy at system peaks. This benefits all of the Company's customers by avoiding higher costs. Finally, Ebon will be hiring approximately 100 full-time permanent positions which will provide benefits to Lawrence County and beyond. See also the Company's responses to AG-KIUC 1-19, JI 1-2, JI 1-3, and JI 1-6.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2022-00387
Joint Intervenor's First Set of Data Requests
Dated December 9, 2022

DATA REQUEST

- 1_39** Please answer the following related to the level of service that the Company would provide to the Proposed Facility.
- a. The level of service (secondary, primary, transmission)
 - b. The phase of the power system (single or 3-phase)
 - c. Contracted capacity in kVa, broken down by Phase 1 and Phase 2 of the proposed project
 - d. The estimated load factor, broken down by Phase 1 and Phase 2 of the proposed project
 - e. Detail the minimum monthly billing, broken down by Phase 1 and Phase 2 of the proposed project.

RESPONSE

- a. Transmission
- b. 3 Phase
- c. Phase 1 = 80,000 kVA, Phase 2 = 250,000 kVA
- d. Phase 1 = 95%-99%, Phase 2 = 95%-99%
- e. Please see KPCO_R_KPSC_1_9_PublicAttachment2 for the requested information.

Witness: Amanda C. Clark

