

Kentucky Power Company  
KPSC Case No. 2020-00174  
KYSEIA Second Set of Data Requests  
Dated September 16, 2020

**DATA REQUEST**

**KYSEIA\_2\_001** Reference Kentucky Power's response to KYSEIA 1-3(b). Please identify and explain the methods that the Company used to generate a value of \$100/MW-day as "the estimated value of PJM RPM capacity."

**RESPONSE**

The two most recent PJM base residual auctions for the RPM capacity construct cleared at \$76.53 /MW-day and \$140 /MW-day for the 2020/2021 and 2021/2022 delivery years respectively. This is consistent with the Company's assumed value of \$100/MW-day.

Witness: Alex E. Vaughan

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**KYSEIA\_2\_002** Reference Kentucky Power's response to KYSEIA 1-3 Attachment 1, in the tab labeled LSE OATT Savings.

1. Does the label in Columns D and E "Add Project MW" refer to the addition of the proxy 20 MW utility-scale project used to create Vaughn Direct Exhibit AEV-3? If it does not, please explain its use.
2. Would these LSE OATT savings be generated by qualifying facilities that take service under Tariff COGEN/SPP I or COGEN/SPP II. Please explain why or why not in detail.

**RESPONSE**

1. Yes, it does. See row 31 of KYSEIA 1-3 Attachment 1, which represents the NSPL and 12CP load reduction from the 20 MW utility scale solar project modeled as a load reducer.
2. No they would not necessarily. Whether such savings would be generated by qualifying facilities taking service under Tariff COGEN/SPP I or COGEN/SPP II is dependent upon the characteristics of the specific customer and resource.

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**KYSEIA\_2\_003** Reference Kentucky Power’s response to KYSEIA 1-15(c) stating “The Company cannot speculate on the frequency of rate changes under tariff NMS II, but it could be as often as each Kentucky Power Company base rate case or as otherwise directed by the Commission.”

1. Does the Company anticipate updating all rate components underlying the avoided cost rate defined in tariff NMS II each time the rate changes in the future, however often that may be?
2. Does the Company anticipate that any updates to the avoided cost rate defined in tariff NMS II will utilize revised assumptions for aspects such as the contribution of solar to peaks, the standard residential load profile, and other assumptions used to create Vaughn Direct Exhibit AEV-3?

**RESPONSE**

1. & 2. Yes, that is a possibility but the Company cannot speculate what will be proposed in future rate cases. Such future proposals may also be influenced by the Commission's decision on tariff and rate matters in this proceeding.

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**DATA REQUEST**

**KYSEIA\_2\_004** Reference Kentucky Power’s response to KYSEIA 1-9 relating to information requests related to average electricity usage by customers that have received low-income assistance and Kentucky Power’s response to KYSEIA 1-10 related to average electricity usage by customers with electric heating.

1. Please identify all assumptions that the Company used in performing the query of its billing system data for customers that received low-income assistance, including but not limited to whether it intentionally excluded any accounts. Please describe the nature of any exclusions or other modifications that the Company made to the data in detail.
2. Please identify all assumptions that the Company used in performing the query of its billing system data for customers that use electric heating, including but not limited to whether it intentionally excluded any accounts. Please describe the nature of any exclusions or other modifications that the Company made to the data in detail.
3. Please separately identify average monthly usage by customers the received low-income assistance that use electric heating, and average monthly usage by customers that received low-income assistance but do not use electric heating. For the purposes of your response, please use the same methodology that the Company used for developing its own estimate of average monthly electricity usage by low-income assistance customers.

**RESPONSE**

1. The billing system query included customer accounts that have been flagged or identified in the Company's billing system as receiving low income assistance, as described in the Company's response to KYSEIA 1-9(b). The billing system query excluded partial year accounts, i.e. accounts that did not have 12 months of billing data.
2. The billing system query excluded partial year accounts, i.e. accounts that did not have 12 months of billing data.

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3. Low income assistance customers during the test year used 1,367 kWh per month on average. Low income assistance customers using electric heating during the test year used 1,410 kWh per month on average. Low income assistance customers not using electric heating during the test year used 1,261 kWh per month on average.

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**DATA REQUEST**

**KYSEIA\_2\_005** Reference the Direct Testimony of Company Witness Alex E. Vaughan (“Vaughan Direct”) at page 12, line 23 through page 13 lines 1-4 stating “This leads to a further reduction in the intra-class subsidy (over-collection of fixed costs) for the Company’s electric heating and lower income customers. As proposed, the winter heating block rate discount is worth \$14.6 million during the winter months (243,427,590 kWh times .06 \$/kWh).”

1. Is it the Company’s contention that low-income and electric heating customers are over-contributing to fixed cost collection at \$14.6 million annually?
2. Does an electric heating customer cause costs to be allocated to the residential class in a greater amount than an otherwise identical non-electric heating customer would, such as through increased allocation of production and transmission costs due to heating demand that coincides with peak demand during cold season months?
3. Has the Company attempted to quantify its costs to serve electric heating customers relative to its cost to serve non-electric heating customers? If so, please provide this analysis and all associated workpapers with all formulas and file linkages intact.
4. If your response to subpart (c) of this request is that the Company has not performed a separate cost of service analysis of electric heating customers, please explain how Witness Vaughn can contend that an “intra-class subsidy (overcollection of fixed costs)” from electric heating customers to non-electric heating customers exists?

**RESPONSE**

1. Please see the pre-filed direct testimony of Company witness Vaughan, specifically the rate design section. Company witness Vaughan maintains that the current residential rate design over-allocates fixed cost recovery to high use customers. The proposed winter tail block rate is designed to reduce the existing residential intra-class subsidy.

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2. No, not necessarily as the class allocation is based upon a 12 coincident peak methodology, so the winter months are weighted equally with all of the other months in the year.
3. No, the Company has not completed a separate cost of service study that isolates electric heating customers into a class of their own.
4. One major foundation of Company witness Vaughan's referenced statement is that the Company's generation capacity obligation is based upon PJM's 5 summer coincident peak hours, electric heating loads do not contribute to those cost causing hours. Also, see the Company's response to part 1 of this request. Electric heating customers use more kWh on average than do non-heating customers, due to the large proportion of fixed costs (generation, distribution and transmission) included in the kWh residential rate. It is simply math that proves higher users such as electric heating customers in the residential class are paying a subsidy to lower users within the class.

Witness: Alex E. Vaughan



### KY Discovery Verification - Vaughan.docx

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#### E-Signature Summary

**E-Signature 1: Alex E Vaughan (AEV)**

September 24, 2020 12:06:53 -8:00 [695DBC43E413] [167.239.2.88]  
aevaughan@aep.com (Principal) (Personally Known)

**E-Signature Notary: Brenda Williamson (BW)**

September 24, 2020 12:06:53 -8:00 [ABA201A38BF6] [167.239.2.87]  
bgwilliamson@aep.com  
I, Brenda Williamson, did witness the participants named above electronically sign this document.





VERIFICATION

The undersigned, Alex E. Vaughan, being duly sworn, deposes and says he is a Director-Regulatory Pricing & Renewables for American Electric Power Service Corporation that he has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of his information, knowledge and belief after reasonable inquiry.

*Alex E Vaughan*  
Signed on 2020/09/24 12:06:53 -8:00  
Alex E. Vaughan

STATE OF OHIO

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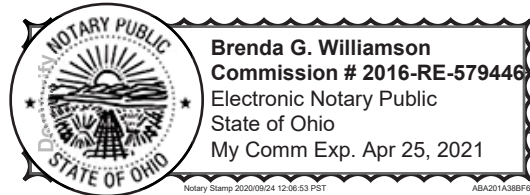
) Case No. 2020-00174

COUNTY OF FRANKLIN

)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by  
09/24/2020 \_\_\_\_\_, this \_\_\_\_ day of September, 2020.

*Brenda Williamson*  
Signed on 2020/09/24 12:06:53 -8:00



818A33BD-1C6D-431A-BA9E-618C4BEFB95B --- 2020/09/24 10:59:49 -8:00 --- Remote Notary

