

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Seventh Set of Data Requests
Dated November 6, 2020
Page 1 of 2

DATA REQUEST

KPSC 7_1

Provide an analysis of income and average usage by census track. This can be accomplished by the following:

- a. For each customer, find the five year average usage by month.
- b. Go to the link below and input the address of each Kentucky Power customer. Enter this identifier on a spreadsheet with the information from (a) above. The program will output the census track associated with the customer's address.
<https://geocoding.geo.census.gov/geocoder/geographies/address?form>
- c. For each census tract, find the income associated on the census website.
- d. For each group of customers in each census track, calculate the five year average usage by month.
- e. Analyze and determine if there is a correlation between income and usage.

RESPONSE

a. - e.) Kentucky Power cannot provide the requested information or analysis. Customer usage information that is more than 3 years old is archived. Due to customers moving and account holders changing over a five year period, the Company estimates that it would need to obtain more than just the 60 unique sets of monthly customer usage information for each of its roughly 165,000 customers. The fact that customers move premises over time also further complicates the requested analysis. The Company estimates that it will take 30 hours to obtain the requested monthly usage information. The Company would then be required to average the monthly usage data.

Once the archived and non-archived usage data is available and averaged by month, Kentucky Power estimates that approximately 825,000 manual data entries into the referenced website would be required in order to obtain the census tract information for each individual customer address. The Company estimates data entry would require an additional 1,125 hours to complete.

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Seventh Set of Data Requests
Dated November 6, 2020
Page 2 of 2

The Company then would have to take census tract numbers obtained for each of the 825,000 manual data entries and cross reference those numbers against income information on the census website that the Company has been unable to locate. Were the Company able to locate income information by census tract on the census website, the Company estimates that it would take at least 8 hours to cross reference that information against the 825,000 census tract numbers obtained from the census geocoding program. It would then take approximately 8 hours to group customers by census tract, calculate the five year average usage by month per customer group per census tract, and compare average usage to income information.

Moreover, because of the large number of households in some census districts (and corresponding widely divergent income and other demographics), as well as the age of the 2010 census data available on the census geocoding website, the Company is concerned that it is not possible to draw a statistically significant correlation between individual customer usage and the district average income utilizing the requested approach. Kentucky Power respectfully refers the Commission to Company Witness Vaughan's direct testimony at page 14, where Mr. Vaughan testifies that the average usage of the Company's low-income assistance residential customer (1,367 kWh) exceeds the average usage (1,240 kWh) of the residential class as a whole. Although the Company is unable to analyze whether there is a correlation between income and usage in the manner requested, Mr. Vaughan's referenced testimony supports the conclusion that such a correlation may exist.

Witness: Alex E. Vaughan

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Seventh Set of Data Requests
Dated November 6, 2020

DATA REQUEST

KPSC 7_2 For the residential class, calculate for each month the monthly usage by customer and provide the graphical representation of this bell curve. Do this for 2018, 2019, and 2020.


RESPONSE

Please refer to KPCO_R_KPSC_7_2_Attachment1 for the available residential customer bill distribution analysis from April 2019 through September of 2020. The Company does not have the requested information prior to the test year in this case.

Witness: Alex E. Vaughan

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

STATE OF OHIO

)

) Case No. 2020-00174

COUNTY OF FRANKLIN

)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Alex Vaughan, this 12 day of November 2020.



Paul D. Flory
Attorney At Law
Notary Public, State of Ohio
My commission has no expiration date
Sec. 147.03 R.C.



Notary Public

Notary ID Number: NA

My Commission Expires: Never