COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of

ELECTRONIC APPLICATION OF KENTUCKY)
POWER COMPANY FOR (1) A GENERAL)
ADJUSTMENT OF ITS RATES FOR ELECTRIC)
SERVICE; (2) APPROVAL OF TARIFFS AND)
RIDERS; (3) APPROVAL OF CERTAIN	CASE NO. 2025-00257
REGULATORY AND ACCOUNTING)
TREATMENTS; AND (4) ALL OTHER REQUIRED)
APPROVALS AND RELIEF)
	<i>)</i>

RESPONSES OF JOINT INTERVENORS APPALACHIAN CITIZENS' LAW CENTER, KENTUCKIANS FOR THE COMMONWEALTH, KENTUCKY SOLAR ENERGY SOCIETY, AND MOUNTAIN ASSOCIATION TO KENTUCKY POWER COMPANY'S FIRST REQUEST FOR INFORMATION

[DATED November 26, 2025]

Dated: December 08, 2025

[**DATED November 26, 2025**]

Case No. 2025-00257

Question No. 1.1

Q-1.1 Please provide all schedules, tables, and charts included in the testimony and exhibits to the direct testimony of Roger Colton in electronic format, with formulas intact and visible, and no pasted values.

A-1.1 RESPONSE:

The workpapers of Roger Colton are attached. See also Response to Staff 1.6.

[DATED November 26, 2025]

Case No. 2025-00257

Question No. 1.2

Q-1.2 Please provide all workpapers, source documents, and electronic spreadsheets used in the development of the testimony of Mr. Colton. The requested information, if so available, should be provided in an electronic format, with formulas intact and visible, and no pasted values.

A-1.2 RESPONSE:

See, response to Question 1. See also Response to Staff 1.6.

[DATED November 26, 2025]

Case No. 2025-00257

Question No. 1.3

Q-1.3 Please refer to page 115, lines 16-22 of the testimony of Randy Colton. Please confirm that the Renewable Energy Consumption Survey (RECS) referenced by Mr. Colton was conducted in 2020 and has not been updated since.

A-1.3 RESPONSE:

Confirmed.

[DATED November 26, 2025]

Case No. 2025-00257

Question No. 1.4

- Q-1.4 Please refer to Figures 13-17 and Table 19 of the testimony of Randy Colton. (a) (b) 5.
 - a. Please confirm that the information presented in Figures 13-17 and Table 19 reflect information for the entire Commonwealth of Kentucky.
 - b. Please confirm that the information presented in Figures 13-17 and Table 19 does not identify specifically any income or housing data for the Company's service territory.

A-1.4 RESPONSE:

- a. Confirmed.
- b. Figures 13 through 17 and Table 19 are statewide Kentucky data.

[DATED November 26, 2025]

Case No. 2025-00257

Question No. 1.5

- Q-1.5 Please refer to page 116, Figure 13 of the testimony of Randy Colton.
 - a. Identify whether the "Annual kWh Usage" term along the vertical axis of the figure reflects the average or median usage within an income range.
 - b. Explain the methodology that determined the line of best fit (the dotted line) in Figure 13.

A-1.5 RESPONSE:

- a. The figure presents the average annual usage along the vertical axis.
- b. The linear line was calculated by Excel using the slope function. According to Excel, The slope function returns the slope of the linear regression line through data points in known_y's and known_x's. The slope is the vertical distance divided by the horizontal distance between any two points on the line, which is the rate of change along the regression line.

[DATED November 26, 2025]

Case No. 2025-00257

Question No. 1.6

Q-1.6 Please refer to pages 117-118, Table 19 of the testimony of Randy Colton. Confirm that each column in Table 19 identifies the percentage of the total amount of housing in each housing category that is occupied by households in different income levels. For example, the value 2.5% in the "less than \$5,000" row for the Mobile Home column means that 2.5% of the total number of mobile homes in Kentucky are occupied by households with incomes less than \$5,000.

A-1.6 RESPONSE:

The percentages in Table 19 are percentages of the columns. The sum of the percentages in each column is equal to 100%.

[DATED November 26, 2025]

Case No. 2025-00257

Question No. 1.7

Q-1.7 Please refer to page 118-119, Figure 15 of the testimony of Randy Colton. Identify whether the "Annual kWh Usage" term along the vertical axis of the figure reflects the average or median usage within an income range.

A-1.7 RESPONSE:

The figure presents the average annual usage along the vertical axis.

[DATED November 26, 2025]

Case No. 2025-00257

Question No. 1.8

- Q-1.8 Please refer to pages 121-122 of the testimony of Randy Colton.
 - a. Please provide a copy of the referenced Census Bureau data.
 - b. Please refer to page 121, line 11 and explain how a "substantial impact on the data" is quantified.
 - c. Please provide the total number of owner-occupied housing units in the Company's service territory and the source of that data.
 - d. Please provide the total number of tenant-occupied housing units in the Company's service territory and the source of that data.

A-1.8 RESPONSE:

- a. See attached file named "Response to KPC Question 8.xlsx"
- b. The definition of "substantial" is large in amount or degree.
- c. See, response to subsection "a".
- d. See, response to subsection "a".

[DATED November 26, 2025]

Case No. 2025-00257

Question No. 1.9

Q-1.9 Please refer to pages 123, lines 6-9 of the testimony of Randy Colton. Explain how, for a customer with monthly usage approaching 2,000 kWh from below, the two-tiered rate structure doesn't incentivize them to maintain their usage below 2,000 kWh.

A-1.9 RESPONSE:

The full passage cited explains the principle for an individual ratepayer:

First, if a customer's use is *already below* 2,000 kWh in a month, the two-tiered rate structure offers no conservation incentives. The customer is already receiving the lower fixed customer charge. Second, if the customer's use is *so far above* 2,000 kWh in a given month that no reasonable amount of energy efficiency will reduce that usage below 2,000 kWh, again, no incentive will exist because the change in Tiers resulting in a reduced fixed customer charge cannot be reached even given energy efficiency investments. (Emphasis added)

As a more general matter, simply reducing consumption does not demonstrate that the two-tiered rate is providing any sort of conservation incentive for customers with usage below 2,000 kWh with which to begin. The conservation incentive posited by the Company only occurs if the two-tiered rate incentivizes the customer to maintain consumption below 2,000 kWh when, without the two-tiers, that customer would have allowed their consumption to increase to more than 2,000 kwh.

In order for the two-tiered rate structure to incentivize customers with monthly usage below 2,000 kWh to maintain their usage below 2,000, their monthly usage would need to be sufficiently close to 2,000 kwh each month for their conservation actions to make the difference between maintaining their usage below 2,000 kWh or allowing their usage to increase to more than 2,000 kWh. That does not occur.

Table A below, presenting data provided by the Company (KPC Response to JI-1-29) shows the median monthly usage (for heating, non-heating, and all residential customers) for the most recent 24 months. For customers in rate class "10," the median usage is not only below 2,000 each month, but it is consistently below 1,000 kWh. In only 2 of the most recent 24 months of data (July 2024, August 2024) did median usage for rate class 10 exceed 1,000, let alone "approach 2,000" as posited in the question. In rate class "20," median usage was somewhat higher but nonetheless still far below 2,000 kWh. In only one month (January 2024) did median consumption "approach 2,000 kWh" as posited in the question. Not only is the median monthly consumption for residential customers far below 2,000 kWh according to the Company's data, the median consumption is consistently far below 2,000 kWh. No "incentive" is provided if the "incentive" occurs only rarely.

Table A. Median use by month (by heating, non-heating, and all) (KPC Response to JI-1-29)				
	10	20	All Residential	
Sum of BKWH_OCT23	674	789	749	
Sum of BKWH_NOV23	648	959	851	
Sum of BKWH_DEC23	821	1,546	1,299	
Sum of BKWH_JAN24	936	1,988	1,627	
Sum of BKWH_FEB24 Sum of	828	1,770	1,444	
BKWH_MAR24 Sum of	704	1,302	1,092	
BKWH_APR24 Sum of	669	1,052	918	
BKWH_MAY24 Sum of	644	813	754	
BKWH_JUN24 Sum of	784	888	851	
BKWH_JUL24 Sum of	1,130	1,179	1,162	
BKWH_AUG24 Sum of	1,083	1,123	1,110	
BKWH_SEP24 Sum of	911	970	950	
BKWH_OCT24 Sum of	711	821	782	
BKWH_NOV24	618	865	778	

Sum of BKWH_DEC24	831	1,510	1,263
Sum of BKWH_JAN25	982	2,110	1,724
Sum of BKWH_FEB25	896	2,010	1,625
Sum of BKWH MAR25	761	1,515	1,241
Sum of BKWH APR25	663	1,014	888
Sum of BKWH MAY25	637	818	752
Sum of BKWH JUN25	701	830	784
Sum of BKWH JUL25	1,167	1,227	1,207
Sum of BKWH AUG25	1,174	1,202	1,193
Sum of BKWH_SEP25	879	936	917

Given the median usage for residential customers as provided by the Company (KPC Response to JI-1-29), it is thus possible to determine the percentage increase in median monthly usage that would need to be avoided each month in order to keep residential customers with usage below 2,000 kWh. The data shows that for residential customers to increase their usage (from median monthly consumption) sufficiently to reach 2,000 kWh in each month, those customers would routinely need to increase their consumption by hundreds of a percent. For rate class "10," the smallest increase needed to move from the median monthly usage to 2,000 kWh usage in that month would have been 70% (August 2025) or 71% (July 2025). In most months, the increase that would need to be avoided is well in excess of 100%, and in nearly half of the months (10 of 24), the increase that would need to be avoided to reach 2,000 would be near or above 200%. Not only is the size of the increase that would need to be avoided in order to "maintain their usage below 2,000 kWh" (in the words of the question), but the consistent incidence of those high percentages is evident as well. Similarly, for rate class "20," in 12 of the 24 months, the increase in usage that would need to be avoided in order to maintain their usage below 2,000 kWh is nearly or above 100%.

Table B. By Month Pct Avoided Increase Needed to Avoid Reaching 2000 kWh from Median Monthly					
	Use				
by Htg and Non-Htg for Most Recent 24 Months (KPC Response to JI-1-29)					
Median 10 20 All Residential					
Sum of BKWH_OCT23 197% 153% 167%					
Sum of BKWH_NOV23	209%	109%	135%		

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Sum of BKWH_DEC23	144%	29%	54%
Sum of BKWH JAN24	114%	1%	23%
Sum of BKWH_FEB24	142%	13%	39%
Sum of BKWH MAR24	184%	54%	83%
Sum of BKWH_MAR24	199%	90%	118%
Sum of BKWH_MAY24	211%	146%	165%
Sum of BKWH_JUN24	155%	125%	135%
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Sum of BKWH_JUL24	77%	70%	72%
Sum of BKWH_AUG24	85%	78%	80%
Sum of BKWH_SEP24	120%	106%	111%
Sum of BKWH_OCT24	181%	144%	156%
Sum of BKWH_NOV24	224%	131%	157%
Sum of BKWH_DEC24	141%	32%	58%
Sum of BKWH_JAN25	104%	-5%	16%
Sum of BKWH_FEB25	123%	0%	23%
Sum of BKWH_MAR25	163%	32%	61%
Sum of BKWH_APR25	202%	97%	125%
Sum of BKWH_MAY25	214%	144%	166%
Sum of BKWH_JUN25	185%	141%	155%
Sum of BKWH_JUL25	71%	63%	66%
Sum of BKWH_AUG25	70%	66%	68%
Sum of BKWH_SEP25	128%	114%	118%

It is not simply customers in the "middle" (i.e., the median use) which demonstrate the lack of incentive provided by the Company's two-tiered rates. Table C below shows residential consumption at various increments of median usage (50%, 75%, 125%, 150% of median). Even at usage which is at 150% of the residential median usage, the monthly consumption is consistently nowhere close to 2,000 kWh. In four months, residential consumption at 150% of median exceeds 2,000 kWh (which falls outside the scope of the question, which queries whether the two-tiered rate would incentivize customers to stay below 2,000 kWh). In only four more months is residential consumption at 150% of the median usage for that month at or above 1,800 kWh. In contrast, in six months, residential consumption at 150% of the median was less than 1,200 kWh, while in 11 months, residential consumption at 150% of the median was less than 1,400 kWh.

Table C. Residential Consumption at Increments of Median Residential Usage (most recent 24						
months)						
(KPC Response to JI-1-27)						
Statistic 50% Median 75% Median 100% Median 125% Median 150% Median						
BKWH OCT23	375	562	749	936	1,124	

BKWH NOV2					I
3	426	638	851	1,064	1,277
BKWH_DEC23	650	974	1,299	1,624	1,949
BKWH_JAN24	814	1,220	1,627	2,034	2,441
BKWH_FEB24	722	1,083	1,444	1,805	2,166
BKWH_MAR2					
4	546	819	1,092	1,365	1,638
BKWH_APR24	459	689	918	1,148	1,377
BKWH_MAY24	377	566	754	943	1,131
BKWH_JUN24	426	638	851	1,064	1,277
BKWH_JUL24	581	872	1,162	1,453	1,743
BKWH_AUG2					
4	555	833	1,110	1,388	1,665
BKWH_SEP24	475	713	950	1,188	1,425
BKWH_OCT24	391	587	782	978	1,173
BKWH_NOV2	000	504	770	070	4 407
4	389	584	778	973	1,167
BKWH_DEC24	632	947	1,263	1,579	1,895
BKWH_JAN25	862	1,293	1,724	2,155	2,586
BKWH_FEB25	813	1,219	1,625	2,031	2,438
BKWH_MAR2	604	024	1 044	4 554	4.060
5	621	931	1,241	1,551	1,862
BKWH_APR25	444	666	888	1,110	1,332
BKWH_MAY25	376	564	752	940	1,128
BKWH_JUN25	392	588	784	980	1,176
BKWH_JUL25	604	905	1,207	1,509	1,811
BKWH_AUG2	597	895	1 102	1 401	1 700
			1,193	1,491	1,790
BKWH_SEP25	459	688	917	1,146	1,376

Table D below thus shows, for the various increments of median usage, the percentage increase in usage that a customer would need to avoid in order to maintain their usage below 2,000 kWh. Remember, the "median" represents the middle, with 50% of customers having usage more than the median and 50% of customers having less. It is as likely, in other words, that a customer will have usage below the median as it is that a customer will have usage above the median. Customers with usage below the median usage each month would need to avoid an increase in usage of hundreds of a percent in order to maintain their consumption below 2,000 kWh. In 12 of the 24 months, for example, customers with usage at 50% of median would need to avoid an increase in usage of more than 300% for the two tiered rate to be the incentive posited in the question.

On the other end of the continuum, even customers with consumption at 150% of median usage would need to avoid a substantial increase in their monthly usage each month. In nine of the 24 months, a customer with usage at 150% of median consumption would need to avoid an increase in their usage of 50% or more. Moreover, remember, it is not simply a one month reduction in usage that would evidence the "incentive" posited in the question, it would be a consistent reduction in usage over time that would be necessary for someone to have the reduction referenced in the question.

Table D. Pct reduction needed to avoid reaching 2000 kWh by Usage at Increments of Median					
(most recent 24 months)					
Statistic	50% Median	75% Median	100% Median	125% Median	150% Median
BKWH_OCT23 BKWH_NOV2	434%	256%	167%	114%	78%
3	370%	213%	135%	88%	57%
BKWH_DEC23	208%	105%	54%	23%	3%
BKWH_JAN24	146%	64%	23%	-2%	-18%
BKWH_FEB24 BKWH MAR2	177%	85%	39%	11%	-8%
4	266%	144%	83%	47%	22%
BKWH_APR24	336%	190%	118%	74%	45%
BKWH_MAY24	431%	254%	165%	112%	77%
BKWH_JUN24	370%	213%	135%	88%	57%
BKWH_JUL24 BKWH_AUG2	244%	129%	72%	38%	15%
4	260%	140%	80%	44%	20%
BKWH_SEP24	321%	181%	111%	68%	40%
BKWH_OCT24 BKWH_NOV2	412%	241%	156%	105%	71%
4	414%	243%	157%	106%	71%
BKWH_DEC24	217%	111%	58%	27%	6%
BKWH_JAN25	132%	55%	16%	-7%	-23%
BKWH_FEB25 BKWH_MAR2	146%	64%	23%	-2%	-18%
5	222%	115%	61%	29%	7%
BKWH_APR25	350%	200%	125%	80%	50%
BKWH_MAY25	432%	255%	166%	113%	77%
BKWH_JUN25	410%	240%	155%	104%	70%
BKWH_JUL25 BKWH_AUG2	231%	121%	66%	33%	10%
5	235%	124%	68%	34%	12%
BKWH_SEP25	336%	191%	118%	74%	45%

Finally, if a customer with monthly usage below 2,000 kWh with which to begin simply reduces their consumption to a level further below 2,000 kWh, the two-tiered rate does not kick-in and the difference in bill reduction between the existing rate structure and the Company's proposed two-tiered rate structure is minimal at best. Exhibit RDC-5 presents the bill savings using the existing rate structure and the proposed two-tiered rate structure for a 100 kWh usage reduction and a 500 kWh usage reduction. As that Exhibit demonstrates, using the proposed two-tiered rate rather than the existing rate structure, a monthly reduction of 100 kWh results in a monthly bill savings of less than \$0.40 for nearly every usage amount below 2,000 kWh. Using the proposed two-tiered rather than the existing rate, even a monthly reduction of 500 kWh would result in a bill reduction of less than \$2.00 in the month of the reduction.

The higher bill reductions are unlikely to occur. As seen in Exhibit RDC-5, to achieve a bill reduction of \$5.38, a customer would need to reduce their usage from 1,000 kWh to 500 kWh, a reduction of 50%. In order to achieve a bill reduction of \$12.36, a customer would need to reduce their monthly usage from 800 kWh to 300 kWh, a usage reduction of 63%. In order to achieve a bill reduction of \$15.85, a customer would need to reduce their monthly usage from 700 kWh to 200 kWh, a usage reduction of 71%.

[DATED November 26, 2025]

Case No. 2025-00257

Question No. 1.10

Q-1.10 Please refer to page 129, lines 14-16 of the testimony of Randy Colton. Confirm that it is your testimony that there are no other ways for customers to reduce their electricity usage except for making investments in energy efficiency.

A-1.10 RESPONSE:

Not confirmed. This question does not accurately state Mr. Colton's testimony. At no point does Mr. Colton assert that "there are no other ways for customers to reduce their electricity usage except for making investments in energy efficiency."

[DATED November 26, 2025]

Case No. 2025-00257

Question No. 1.11

Q-1.11 Please confirm that the highlighting in Exhibit RDC-2 is for identification purposes and is not information that Joint Intervenors consider confidential information.

A-1.11 RESPONSE:

Confirmed that the highlights do not indicate information that the Joint Intervenors consider to be confidential information. The highlights are intended to improve readability.