

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF LOUISVILLE)	
GAS AND ELECTRIC COMPANY FOR AN)	
ADJUSTMENT OF ITS RATES FOR ELECTRIC)	
AND GAS SERVICE, A CERTIFICATE OF)	
PUBLIC CONVENIENCE AND NECESSITY TO)	
DEPLOY ADVANCED METERING)	CASE NO.
INFRASTRUCTURE, APPROVAL OF CERTAIN)	2020-00349
REGULATORY AND ACCOUNTING)	
TREATMENTS, AND ESTABLISHMENT OF A)	
ONE-YEAR SURCREDIT)	

**SECOND SET OF DATA REQUESTS OF JOINT INTERVENORS MOUNTAIN
ASSOCIATION, KENTUCKIANS FOR THE COMMONWEALTH, AND KENTUCKY
SOLAR ENERGY SOCIETY TO KENTUCKY UTILITIES COMPANY**

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Dated: February 5, 2021

DEFINITIONS

1. "Document" means the original and all copies (regardless of origin and whether or not including additional writing thereon or attached thereto) of any memoranda, reports, books, manuals, instructions, directives, records, forms, notes, letters, or notices, in whatever form, stored or contained in or on whatever medium, including digital media.
2. "Study" means any written, recorded, transcribed, taped, filmed, or graphic matter, however produced or reproduced, either formally or informally, a particular issue or situation, in whatever detail, whether or not the consideration of the issue or situation is in a preliminary stage, and whether or not the consideration was discontinued prior to completion.
3. "Person" means any natural person, corporation, professional corporation, partnership, association, joint venture, proprietorship, firm, or the other business enterprise or legal entity.
4. A request to identify a natural person means to state his or her full name and business address, and last known position and business affiliation at the time in question.
5. A request to identify a document means to state the date or dates, author or originator, subject matter, all addressees and recipients, type of document (e.g., letter, memorandum, telegram, chart, etc.), identifying number, and its present location and custodian. If any such document was but is no longer in the Company's possession or subject to its control, state what disposition was made of it and why it was so disposed.
6. A request to identify a person other than a natural person means to state its full name, the address of its principal office, and the type of entity.
7. "And" and "or" should be considered to be both conjunctive and disjunctive, unless specifically stated otherwise.
8. "Each" and "any" should be considered to be both singular and plural, unless specifically stated otherwise.
9. Words in the past tense should be considered to include the present, and words in the present tense include the past, unless specifically stated otherwise.
10. "You" or "your" means the person whose filed testimony is the subject of these data requests and, to the extent relevant and necessary to

provide full and complete answers to any request, “you” or “your” may be deemed to include any other person with information relevant to any interrogatory who is or was employed by or otherwise associated with the witness or who assisted, in any way, in the preparation of the witness’ testimony.

11. “Company” or “KU” means Kentucky Utilities Company and/or any of their officers, directors, employees, or agents who may have knowledge of the particular matter addressed, and affiliated companies including Pennsylvania Power and Light.

12. “Joint Intervenors” means the Mountain Association, Kentuckians For The Commonwealth, and Kentucky Solar Energy Society, who were granted the status of full joint intervention in this matter.

INSTRUCTIONS

1. If any matter is evidenced by, referenced to, reflected by, represented by, or recorded in any document, please identify, and produce for discovery and inspection each such document.

2. These requests for information are continuing in nature, and information which the responding party later becomes aware of, or has access to, and which is responsive to any request is to be made available to Joint Intervenors. Any studies, documents, or other subject matter not yet completed that will be relied upon during the course of this case should be so identified and provided as soon as they are completed. The Respondent is obliged to change, supplement, and correct all answers to interrogatories to conform to available information, including such information as it first becomes available to the Respondent after the answers hereto are served.

3. Unless otherwise expressly provided, each data request should be construed independently and not with reference to any other interrogatory herein for purpose of limitation.

4. The answers provided should first restate the question asked and also identify the person(s) supplying the information.

5. Please answer each designated part of each information request separately. If you do not have complete information with respect to any interrogatory, so state and give as much information as you do have with respect to the matter inquired about, and identify each person whom you believe may have additional information with respect thereto.

6. In the case of multiple witnesses, each interrogatory should be considered to apply to each witness who will testify to the information requested. Where copies of testimony, transcripts or depositions are requested, each witness should respond individually to the information request.

7. The interrogatories are to be answered under oath by the witness(es) responsible for the answer.

**SECOND SET OF DATA REQUESTS PROPOUNDED TO KENTUCKY UTILITIES
COMPANY (KU) BY JOINT INTERVENORS**

KU_JI_Data_Request_2

Question 2-1

a. Please provide 2019, 2020 and YTD data for the number of people who are eligible for electric disconnection by address and census tract.

b. Please provide 2019, 2020 and YTD data on the number of people who are late in their electric payments by address and census tract.

c. Please provide 2019, 2020 and YTD data on the average amount owed on past due bills by address and census tract.

d. Please provide 2019, 2020 and YTD data on the number of people who have a signed repayment plan by address and census tract.

e. Please provide current data on the number of people who are late in their payments, but do not have a signed payment plan in place by address and census tract.

f. Please provide current data on the number of people who have a signed payment plan who are current on that payment plan by address and census tract.

g. Please provide current data on the number of people who have a signed payment plan who have missed one or more payments by address and census tract.

h. Are the people who have missed one or more payments on their payment plan included in the overall number of people who are currently eligible for disconnection?

i. Please provide information and data regarding the mean and median number of months customers are behind on payments both in the aggregate and by census tract.

j. Please provide information and data regarding the number of accounts and the average bill amount due for those that are 2 months behind on payments, 3 months behind on payments, 6 months behind on payments, and 9 months behind on payments.

k. Please describe your practices for when someone falls behind on a payment plan. If they miss one payment, are they immediately eligible for disconnection?

l. Please provide data on the number of electric meters by census tract.

m. Please provide data on costs associated with damages and repairs to infrastructure by census tract.

n. What amount of funds that you are seeking in this case, are allocated toward capital expenditures?

Question 2-2

Regarding late fees included in the KU proposed tariff:

a. What is the amount of the proposed late fee?

b. What is the basis for the amount of fee, i.e. is it calculated based on a percentage of the arrearage, on the lost value of the late payment, or other basis?

c. What is the rationale for imposition of a late fee in residential customers?

d. Please provide any empirical evidence for the proposition that a late fee on KU residential customers results in more on-time payments.

e. Please provide the number and percentage of residential customers, other than customers using LIHEAP dollars, who were late in a

monthly payment in the six months before the suspension of the utility's ability to impose late fees under PSC Case No. 2020-085.

f. Please provide the number and percentage of residential customers, other than customers using LIHEAP dollars, who were late in a monthly payment in the six months after the suspension of the utility's ability to impose late fees under PSC Case No. 2020-085.

g. Is KU aware that in order to access LIHEAP crisis monies for utility bill assistance, the eligible ratepayer must be late in paying their bill?

h. If so, please explain why the utility assesses late fees in such cases, and whether it waives such fees for LIHEAP-eligible ratepayers.

Question 2-3

The response to MA-KFTC-KSES DR1Q 1-48, states “the cost of distribution facilities in dense neighborhoods is often higher because the facilities often utilize underground distribution facilities in dense neighborhoods, which are often more costly” Please provide the list of neighborhoods which have underground distribution facilities. Please provide a breakdown of expenses associated with underground facilities vs above-ground facilities.

Question 2-4

In response to MA-KFTC-KSES DR1, Q 41a (pg. 71 of pdf) the company appears to reject the premise that increases in the Basic Service Charge discourage energy efficiency. Please clarify:

a. Does the company agree that as the fixed Basic Service Charge becomes a higher proportion of the bill then the customer's financial pay-off for using less energy, and for investing in energy efficiency, declines?

b. Does the company agree that conserving energy resources is a principle that should factor into utility rate making? If not, why not.

Question 2-5

In Mr. Thompson's testimony he discusses the companies' concern for economic development (Section 3, pg. 13; PDF 15) and says that the companies “work tirelessly to empower business growth and expansion throughout Kentucky”. In the companies' response to AG Initial Data Requests Questions 69 and 263, it is mentioned that economic

development expenses are included in base rates because when businesses locate in the state this brings significant economic benefits to customers.

a. Since reduction of fossil fuel emissions and of other adverse environmental impacts also bring significant economic benefits to the state through reduction of healthcare and environmental impact costs, why are avoidance or reduction of those adverse impacts not recognized and factored in when developing net metering tariffs? (as indicated in the companies' response to Sierra Club question 2c.) Since economic development, health, and environmental impacts are all "externalities," why is economic development recognized and factored into the rate request while health and environmental impacts such as carbon reduction are not factored in?

b. How does KU square their concern for economic development with their explicit rejection of economic development and job impacts as factors considered in developing the new net metering tariff (see response to MA-KFTC-KSES DR1, Q 22; pg. 37 PDF, in which here these are rejected as "externalities for the purpose of ratemaking in Kentucky").

c. How does KU square their concern for economic development with the negative impact that NMS-2 will have on the rooftop solar industry in Kentucky (since installation of panels will become less economical for residential and small business customers)? If the companies deny that the NMS-2 will have a negative impact on this industry, please explain why not and provide data to support this argument from other states that have reduced credit for energy fed to the grid.

Question 2-6

Does KU agree that the length of time needed to recover a customer's investment in rooftop solar through credits against usage will significantly increase when moving from NMS-1 to NMS-2, since there would be a more than 2/3 reduction in the credit for energy fed to the grid with NMS-2?

Question 2-7

Does KU agree that post-COVID-19, many solar owners work outside the home and cannot shift their usage to daytime hours?

Question 2-8

Referring to 02_MA_KFTC_KYSES_DR1_KU_Responses, In Q 1-2, Joint Intervenors asked what is the Company's projection for how NMS customer cumulative capacity would expand through 2025 under two scenarios: (1) If the NMS tariff remained in its current form with 1 for 1 netting at the retail rate, and (2) Under the proposed NMS-2 tariff? The Company states it did not run the scenario requested for the NMS-1 scenario.

a. Why did the Company not run the comparative scenarios, in light of the company's interest in economic development?

Question 2-9

In 03-PSC-DR2_KU-Responses-Vol_2 of 2, question 108, the Company projects that if NMS-1 were to remain in effect and recent growth trends were to continue, the 1% cap on net metering would be reached in approximately 6 years. In contrast, in the NMS-2 scenario provided in response to Joint Intervenors Q2 (cited above), the Company projects that aggregate capacity will not reach 1% of system peak load by 2050.

Please provide a side-by-side comparison of the Company's projections for how the installed capacity of customer-generation would expand through 2050, in 5-year increments, under two scenarios: (1) with NMS-1 in effect through 2050 and (2) with NMS-2 taking effect in June 2021. Provide the projected annual growth rates of installed capacity for each scenario.

Question 2-10

Referring to 02_MA_KFTC_KYSES_DR1_KU Response, Q3, Please clarify and clearly respond: For NMS-2 customers, will the credits produced by the net metering system be applied to offset surcharges which are based on kWh usage?

Question 2-11

For customers taking service under time-of-use rates,

a. why does the Company charge higher rates for on-peak consumption versus off-peak consumption?

b. Does the Company or ratepayers derive any benefits from customers shifting consumption from on-peak to off-peak times? Please identify and describe all such benefits.

c. Please provide all analysis of the costs of service and cost of generation during on peak and off-peak times.

Question 2-12

In reference to 02-MA-KFTC-KYSES-DR1_KU Responses, Q17, KU was asked “If a customer investing in solar submits a net metering application for NMS service before the NMS-2 service tariff is approved, but due to weather or other contingencies the system is not “operational” before NMS-2 service takes effect, would they be served under NMS-1 or NMS-2?”

The Company's response referred to ““02-KSIA_DR1_LGE_Responses” which states: “Under KRS 278.466(6), only those net metering customers whose eligible electric generating facilities are in service before the Commission approves Rider NMS-2 in this proceeding may take service under Rider NMS-1; all other net metering customers will take service under Rider NMS-2 regardless of their application date.”

a. Please respond whether the hypothetical customer would be ineligible for NMS-1 and would be served under NMS-2.

b. Would an eligible generator need to be “operational” before the NMS-2 tariff takes effect in order to qualify for NMS-1 service.

c. If yes, how does the Company reconcile this answer with the statement in “04-KU-Customer Notice of Rate Adjustment,” which states: “Rider NMS-1 will serve eligible electric generating facilities as defined in KRS 278.465(2) for which customers have submitted an application for net metering service before the effective date of rates established in this proceeding.”

d. Please respond as to whether it is accurate to say that, according to the “Customer Notice of Rate Adjustment,” customers who submit an application for net metering service before the effective date of rates established in this proceeding will be eligible to take service under NMS-1 and receive the grandfathering protections as defined in KRS278.466?

e. Just to be clear, please affirmatively clarify whether the threshold for determining a customer’s eligibility to receive NMS-1 service – will be the date of submittal of an NM application, as was stated in the “Customer Notice of Rate Adjustment,” or the date the system is placed in service. If it is the latter, when will KU publish an accurate “Customer Notice of Rate Adjustment” regarding that threshold date.

Question 2-13

From which customer classes were Economic Development Rider credits collected in years 2011 – 2020? For each year 2011-2020, what was the customer charge within each class for the EDR? For 2011 – 2020, identify how the funds collected via the EDR were used and who were the eligible and actual recipients of those funds.

Question 2-14

Has the Company performed any analysis or given consideration to joining the Midcontinent Independent System Operator (MISO)?

Please provide all documents and analyses performed by or on behalf of the Company concerning the feasibility, costs, and/or benefits of joining MISO.

Question 2-15

Ref: Response to AG 2-114: What amount and percentage of forecasted load by class is projected to be provided to net metered facilities?

Question 2-16

Ref: Response to AG 2-115: What amount and percentage of historical load by class was provided to net metered facilities?

Question 2-17

Ref: Response to AG 2-141: How are loss factors used by the Company in calculating the proposed compensation rate for customer generation? Please explain in detail.

Question 2-18

Ref: Response to AG 2-179: The data provided in the response suggests that the Company experiences system peak demand often during hours when solar photovoltaic systems would typically be generating electricity.

a. Please confirm whether the Company observes or believes there to be some coincidence, even if not perfect coincidence, between solar production and system peak demands.

b. Please explain how any degree of coincidence between solar production and system peak demands is accounted for in the calculation of the compensation rate for customer generation.

Question 2-19

Ref: Response to AG 2-245 - Please explain how the Company evaluates the potential for distributed energy resources and non-wires solutions to avoid or defer planned transmission spending.

- a. What criteria are applied in such evaluation?
- b. How is such potential calculated?
- c. How are such potential benefits reflected in the calculation of the proposed compensation rate for customer generation?

Question 2-20

Ref: Response to AG 2-249 - Please explain how the Company justifies spending \$1 million dollars and recovering that cost from customers without having conducted any cost-benefit analysis.

Question 2-21

- a. Ref: Response to AG 2-252 - Please explain whether two-way electricity flow from distributed generation passes through any of the Company's substations.
- b. Please indicate whether the Company has had to install any backflow prevention equipment anywhere in its system due to injections from customer generation.
- c. Please explain what service or function will be performed by the proposed DERMS and the costs that the Company is currently experiencing as a result of energy injections from customer generation.

Question 2-22

Ref: Response to AG 2-263

- a. Please explain in detail the amounts revenue requirement associated with providing economic development assistance, in total, by year, and by customer class.

b. Please compare this to the revenue and alleged cross-subsidy impacts of customer generation.

c. Please explain how the Company justifies spending revenues from customers to obtain social externalities like payroll dollars, increased demand for housing, greater capital investment, a broader tax base and other non-electricity benefits.

d. Please document with cost-of-service data how the costs of economic assistance specifically translate into economy expansion benefits and reduced costs of service for all customers.

Question 2-23

Ref: Response to KYSEIA 1-8 - Please explain the basis for asserting that Exhibit WSS-2 shows the cost to serve a residential distributed generation customer. Is the data based on a study of the cost of service for DG customers? If not, what supports the assertion?

Question 2-24

Ref: Response to KYSEIA 1-10 - Please reconcile the response to KYSA 2-10, which states that interval data for 100 customers is insufficient to provide a representative sample and the categorical assertion in KYSEIA 1-8 concerning the cost to serve DG customers. That is, explain the Company's basis for asserting that the data in KYSEIA 1-8 "shows the cost to serve a residential distributed generation customer" when the interval data for 100 customers is insufficient to be representative.

Question 2-25

Ref: Response to KYSEIA 1-15 - Is it the Company's assertion in this response that AMI deployment will provide customers with the technical capability and data in real time in order to perfectly align--on an instantaneous basis--consumption with production? If not, what additional technology or action will be necessary to align production and consumption in real time and achieve full value for production in offsetting consumption?

Question 2-26

Ref: Response to KYSEIA 1-17 - Please confirm that the Company's proposed tariff design eliminates all netting of consumption and production charges and credits over the billing period. If the Company

does not agree, please explain how and the exact extent to which the proposed tariff design performs netting.

Question 2-27

Ref: Response to KYSEIA 1-19

- a. What availability factor (hours of actual production compared to hours of rated production as a ratio) does the Company estimate or observe for non-utility customer generation connected to its system?
- b. How do contracts change the actual operating performance of solar systems--the observed availability factor?
- c. Please provide the technical explanation of this effect.
- d. Please explain how a customer generator's desire to reduce their utility bill with self-generation results in a different availability factor than for non-utility generators operating pursuant to a wholesale sales contract with the Company.
- e. Please provide copies of data and citations to sources that the Company relies upon for its answers and explanations.

Question 2-28

Ref: Response to MHC/KFTC/KSES 1-24 - If the Company is not addressing alleged cross-subsidies or the costs to serve net metering customers in this proceeding, what is the Company's justification for proposing a net metering credit rate less than the full retail rate? Please explain.

Question 2-29

In response to MA-KFTC-KSES DR1, Q 40 (pg. 70 pdf), which asked for examples of the new TOD rate designs that will be available with AMI and examples of how these might save customers money, KU stated: " No analysis related to these opportunities has been performed as this analysis requires interval customer usage data."

Since no company data is available, please provide examples from other utilities of new rate designs allowed by AMI and provide evidence that these have led to energy use reductions and bill savings.

Question 2-30

With reference to the WeCare program

- a. What percent of applicants to the WeCare program receive assistance?
- b. Of those who are denied, what are the most common reasons for denial? (please give percentage of applicants in this response).
- c. The companies state that the WeCare plus program will not be implemented because the partner in this program did not receive funding. Does the company have any plans to find other partners or other sources of revenue for this program? If not, why not?

Question 2-31

With reference to the Home Serve Protection Plan,

- a. what percent of customers have needed to repair customer-owned equipment, and what has been the average cost of those repairs?
- b. In offering this plan to customers, will the companies provide data on the percent of customers that have needed repairs, and the average cost?

Question 2-32

What are the companies' plans for their own solar installations in the next 6-10 years?

Question 2-33

In response to MA-KFTC-KSES DR1, Q-31 (pg. 52 of pdf) the company states that a PAYS-type program did not score well on the Total Resource Cost (TRC) test, and referenced other cost/benefit test scores as well.

Please clarify:

- a. What was the underlying residential usage data that was used for these analyses? Please provide this data to the joint interveners in an anonymized format, identified by zip code.

b. Electric usage data used for the analysis, or if not, electric usage data for ratepayers in general. Please include any information on the size of these residences as well, if available.

c. Energy intensity data used for the analysis, or if not, energy intensity data for the ratepayers in general.

d. Energy burden data used for the analysis, or if not applicable, energy burden data for ratepayers in general.

e. Does the company agree that the TRC is an inappropriate metric on which to evaluate a PAYS-type program, since it does not account for cost recovery for site-specific investments, resulting in no net costs for the energy retrofits?

f. Does the company agree that the Utility (PAC/UCT) Test is the appropriate metric for evaluating a PAYS-type program, and confirm that your presented score of 3.57 on that test is an indicator that a PAYS-type program would be beneficial to ratepayers, participants, and investors alike?

g. Given the fact that the Kentucky Public Service Commission, along with regulators in other southeastern states such as Arkansas, Tennessee, and North Carolina have already approved PAYS-type programs, and the fact that the PAYS program run by Ouachita Electric even passed the RIM test, can you document the discrepancies between these examples and the numbers presented for your own cost/benefit tests as presented?

Question 2-34

In Attachment to Response to MA KFTC KSES-1 Question No. 34 Page 5 of 8, the company states that "typical DSM program planning period of 7 years or less can limit the term period of the loan (sic) which could exceed the life of the program." Given that cost recovery for other utility investments are tied to the life of the investment (power plants, for instance) and can continue on for decades:

a. Shouldn't cost recovery for DSM investments also be tied to the life of the installed measures?

b. Shouldn't the PAYS-type program be analyzed based on those terms?

Question 2-35

It often takes years to fully investigate and implement new PAYS-based programs. For example, it took Mountain Association and its rural electric cooperative partners over 2 years to get from talks to the first retrofit completed for the How\$martKY program in 2011. Given the speeds with which the landscape has shifted for utilities over the past decade:

a. Would it not be prudent for the company to be learning about PAYS-type programs by experience, via a pilot program of around 500-100 homes/year, targeted to the renters and low-moderate income ratepayers that are historically unable to access more typical DSM offerings?

b. Shouldn't the company be prepared to consider if and how a PAYS-type program might offset the need for future investments in capacity, transmission, and distribution infrastructure?

Question 2-36

Given the global rush towards clean energy and the signals from the Biden administration regarding climate change initiatives and investments, shouldn't the companies be building the systems and infrastructures through which Kentucky might deploy such investments?

Question 2-37

Ref: Company response to AG 2-17- Please explain how and estimate the impacts on cost of service resulting from changes in air emissions standards (NAAQS). Please provide current and expected values in cents per kWh by customer class.

Question 2-38

Ref: Response to AG 2-19 - Please provide a detailed explanation with quantification of how generation retirement costs are allocated to customers, by customer class.

Respectfully submitted,



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CERTIFICATE OF SERVICE

This is to certify that the electronic version of the foregoing is a true and accurate copy of the same document that will be filed in paper medium; that the electronic filing has been transmitted to the Commission on February 5, 2021; that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding; and that in accordance with the March 16, 2020 Commission Order in Case No. 2020-00085 an original and ten copies in paper medium of this *Statement Regarding Receipt of Electronic Transmissions* will not be mailed until after the lifting of the current state of emergency.



Tom FitzGerald