

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC DEMAND SIDE)	
MANAGEMENT FILINGS OF LOUISVILLE)	
GAS AND ELECTRIC COMPANY AND)	CASE NO. 2019-00105
KENTUCKY UTILITIES COMPANY)	
)	

RESPONSE OF
LOUISVILLE GAS AND ELECTRIC COMPANY
AND
KENTUCKY UTILITIES COMPANY
TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION
DATED MAY 30, 2019

FILED: JUNE 14, 2019

**Louisville Gas and Electric Company and Kentucky Utilities Company
Response to Commission Staff's First Request for Information
Dated May 30, 2019**

Case No. 2019-00105

Question No. 1

Witness: David E. Huff / Jonathan S. Whitehouse

- Q-1. Explain why LG&E/KU decided to purchase all 10,000 Advanced Metering Systems (AMS) meters at one time.
- A-1. LG&E/KU decided to purchase the incremental meters at one time to both gain an approximate 2.5% discount and to ensure a positive customer experience for the Advanced Meter Program by maintaining a reasonable time from program enrollment to meter installation. As of June 10, 2019 there are 1,462 LG&E meters and 1,982 KU AMS meters remaining in inventory. LG&E reached its participation limit of 10,000 customers in May and KU expects to reach 10,000 participants by the end of July 2019. Any unused meters after that point are planned to be available to facilitate meter installations as customers move, which necessitates a meter exchange, or for any maintenance needs.

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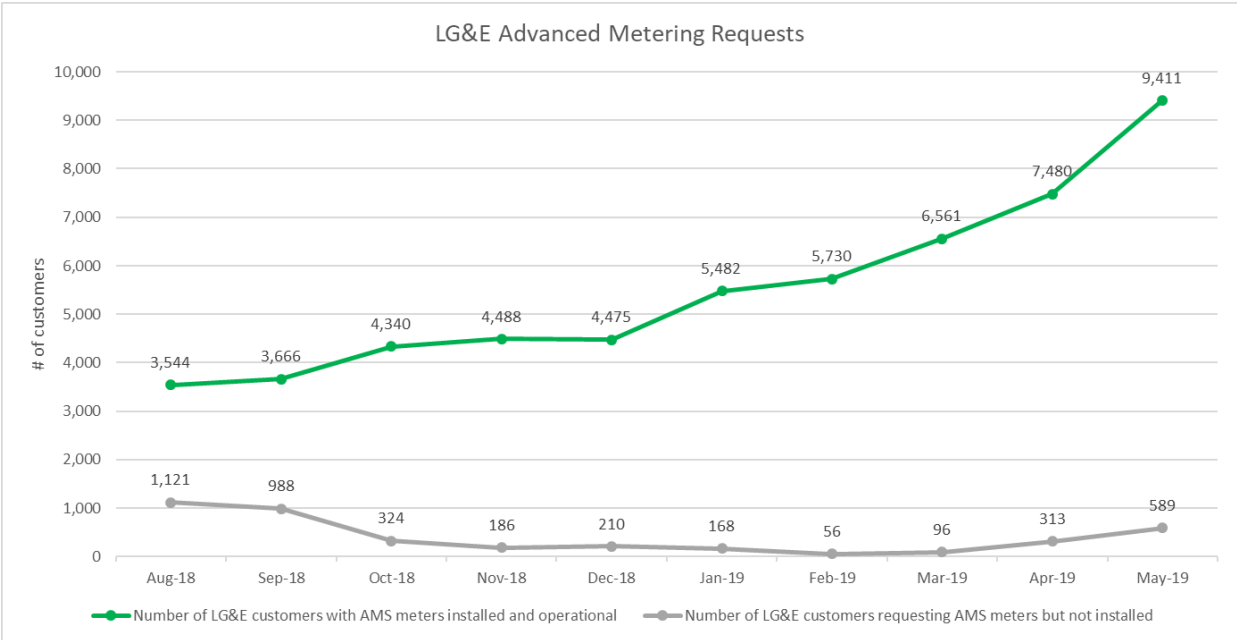
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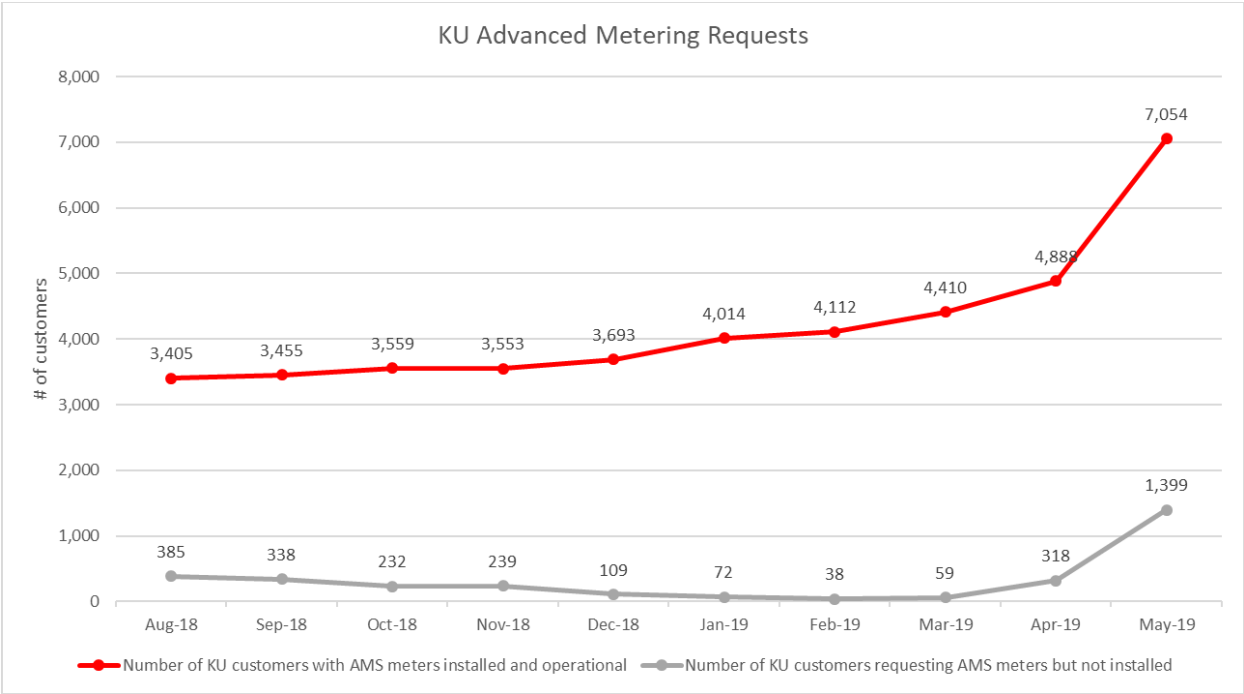
Question No. 2

Witness: David E. Huff / Jonathan S. Whitehouse

- Q-2. Provide a chart showing separately for LG&E and KU the number of AMS meters installed and operational as of August 31, 2018, and as of the end of each subsequent month through May 31, 2019. Also, show on that chart the number of AMS meters requested but not installed as of the end of each of the months.

- A-2. LG&E and KU track AMS requests by customer rather than by meter as some customers have more than one meter. Please see below for the numbers of customers requesting AMS with meters installed and operational as well as the number of customers requesting AMS meters but not yet installed as of month end from August 2018 through May 2019.





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Question No. 3

Witness: David E. Huff / Jonathan S. Whitehouse

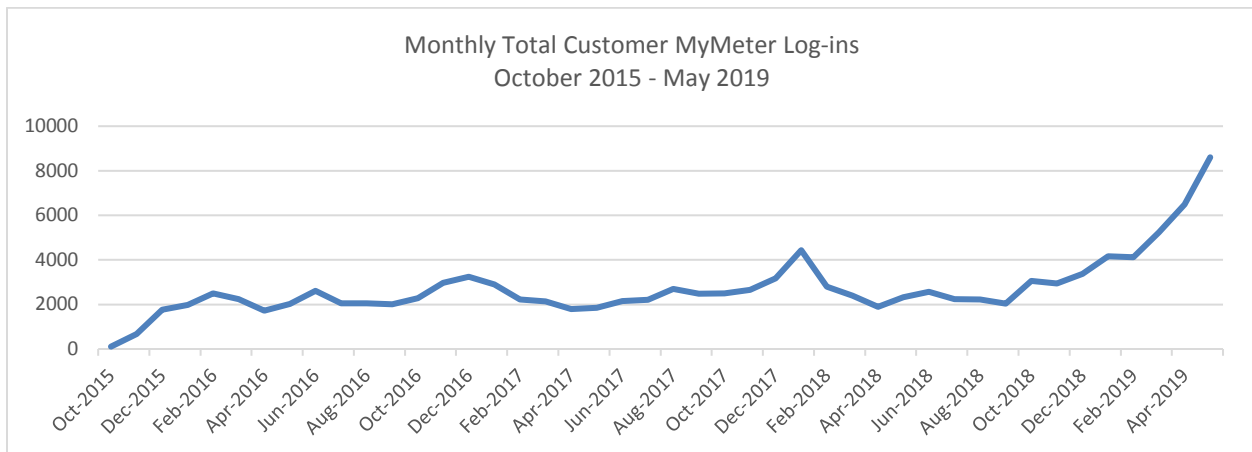
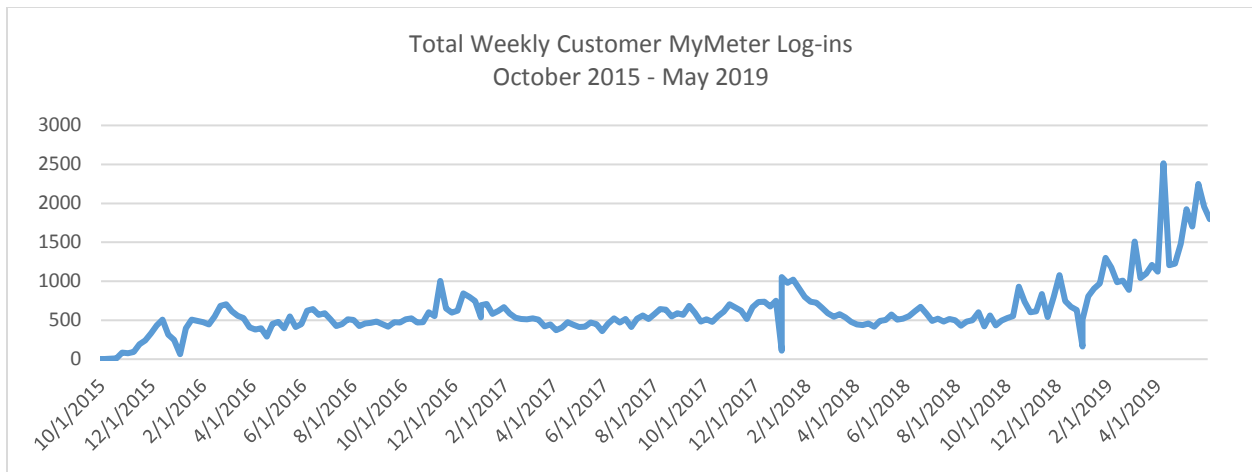
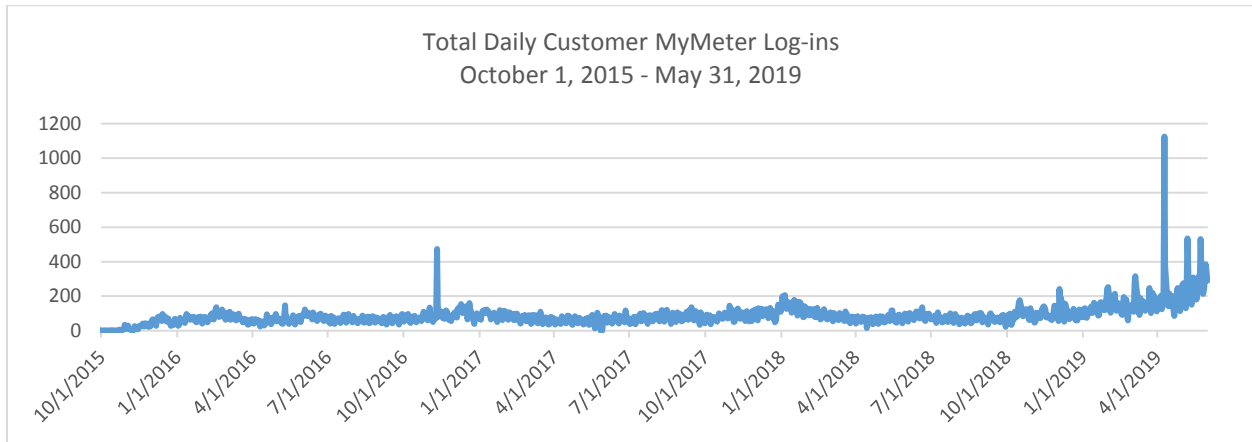
- Q-3. Provide the average number of times per day, per week, and per month, a customer with an AMS meter accessed the online portal for AMS information. Also, provide the number of customers with an AMS meter for 12 months or more who have accessed the online portal six times or less in the past six months.
- A-3. Please see the below table for the average number of times per day, per week, and per month, a customer with an AMS meter accessed the online portal for AMS information. These averages are based on total login activity from September 7, 2015 through May 31, 2019 so the Companies are providing the requested information by year.

Average Number of Times MyMeter Portal was Accessed	2015 Sept - Dec	2016	2017	2018	2019 Jan - May
Per Day	29	76	79	88	188
Per Week	155	531	551	617	1,301
Per Month	642	2,304	2,394	2,680	5,691

There are 1,483 customers currently enrolled with an AMS meter for 12 months or more as of May 31, 2019 that have accessed the online portal at least once but six times or less in the past six months (between December 1, 2018 and May 31, 2019).

The Companies are actively working to increase customer knowledge on the capabilities of an AMS meter to assist them in understanding and managing their energy use. The Companies launched a monthly participant newsletter in March 2019. The Companies' have seen an uptick in average monthly logins for the MyMeter portal. In total, the number of MyMeter logins¹ averaged 2,366 per month prior to March 2019 and have averaged 6,728 per month from March through May 2019.

¹ This is the total number of logins to the portal without regard to how long they have had an AMS meter and may include the same customer accessing the portal multiple times.



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Question No. 4

Witness: David E. Huff

- Q-4. Regarding the Enhanced Meter Management (MDMS Alternative), explain how the approximated \$2 million to test this program will be financed.
- A-4. The Companies continue to evaluate MDMS alternatives. Ultimately, financing an MDMS will be accomplished through normal utility financing consistent with the Companies' other capital projects. The Companies do not plan to allocate any of this cost to Demand Side Management.

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Question No. 5

Witness: David E. Huff / Jonathan S. Whitehouse

- Q-5. Refer to the LG&E/KU Tariff Filings, Attachment 1, page 19 of 29. Explain each change in the marketing of the AMS Opt In program between May 31, 2018, and May 31, 2019. If LG&E/KU customer service representatives offer AMS meters to customers requesting new or changed electric service, provide a copy of the complete text used by the customer service representatives to offer and describe the AMS meters.
- A-5. Between May 31, 2018 and January 2019 the Companies had largely stopped marketing the AMS Opt In program because of the potential for confusion with the CPCN request for full deployment. In this timeframe the Companies issued an email to 1,100 Small Commercial KU customers in June 2018, and an email to 48,000 residential KU customers in July. Generally, the Companies were concerned that customers may not understand why the Companies were asking the Commission for approval to install AMS meters while at the same time asking if they wanted one through the AMS Opt In program. Thus, the Companies felt it was best to minimize the marketing of the AMS Opt In program while waiting on the outcome of the CPCN to determine the best strategy for moving forward with customer education.

Since January 2019, LG&E/KU have enhanced existing educational materials and tutorials available to customers online at <https://lge-ku.com/advanced-meter>. These changes were aimed at raising the awareness of various existing and new functionalities available to participants of the AMS Opt In program and continue to make use of both text and video formats. Additional changes were also made to the online customer self-service portal (My Account) to improve the visibility of the Advanced Meter Program for non-participating customers as well as the link to access MyMeter for current participants.

Marketing the AMS Opt In program continues to use many of the same channels as years past including the use of email campaigns, social media, digital advertising, and customer newsletters. New marketing efforts since May 31, 2018 have also included the use of billboards, radio, meter displays in service centers, and direct mail all of which were introduced in March or April 2019. These channels typically include educational materials for the prospective participant regarding what they get as a result of their participation. As an example, please see the attachment for the direct mail piece used in KU. This piece was sent to customers in areas where the RF Mesh was available but were not participating in the AMS Opt-In program and includes functionality callouts over the MyMeter dashboard so customers can better understand what they get for participating.

Additionally, marketing expanded to include customer service representatives offering AMS meters to customers during customer inquiries. Examples of the type of customer inquiries are listed below:

- New or changed electric service (move-ins)
- Billing or credit related questions
- Disconnection or reconnection
- Alternative rates e.g. Residential Time of Day
- Information on how they can better manage their consumption.
- Meter access issues
- Solar Share Program

Customer inquiries such as those listed above do not have a “script” that a customer service representative follows due to the varied nature of customer inquiries. It is not possible to write a “script” for every possible way a conversation with a customer may go. Customer service representatives are trained with guidelines and policies on how to handle customer inquiries and were trained to ask customers during customer calls the following question, *“Would you like to enroll your new address in our Advanced Meter Program at no additional cost?”* If the customer requested more information the representative was asked to reply with, *“The advanced meter allows you to access detailed usage information which you can use to better understand electricity usage at your new home / business. Your usage will be displayed in 15 minute intervals on MyMeter which may be accessed through My Account.”* Should the customer not be interested, then the customer service representative was trained to thank the customer for considering an advanced meter and complete the customer call transaction.

Once the 10,000 limit is reached at each Company, customer service representatives will no longer offer an advanced meter to customers.

switch from your basic meter to an advanced meter at no extra cost.

View Near Real-Time Usage

Sign Up For Text Alerts

Set Energy Markers

Rate Comparison Tool

Historical Data



It's smart, simple and available
at no extra cost.

Sign up today at lge-ku.com/amp.

KU
a PPL company



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO. 65013 LOUISVILLE, KY

POSTAGE WILL BE PAID BY ADDRESSEE

ADVANCED METER PROGRAM
LG&E AND KU ENERGY LLC
4410 BISHOP LN
LOUISVILLE KY 40218-9819

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Attachment to Response to PSC-1 Question No. 5
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Huff/Whitehouse





Yes! I want an Advanced Meter— at no extra cost!

Return this postage-paid card in the mail today.

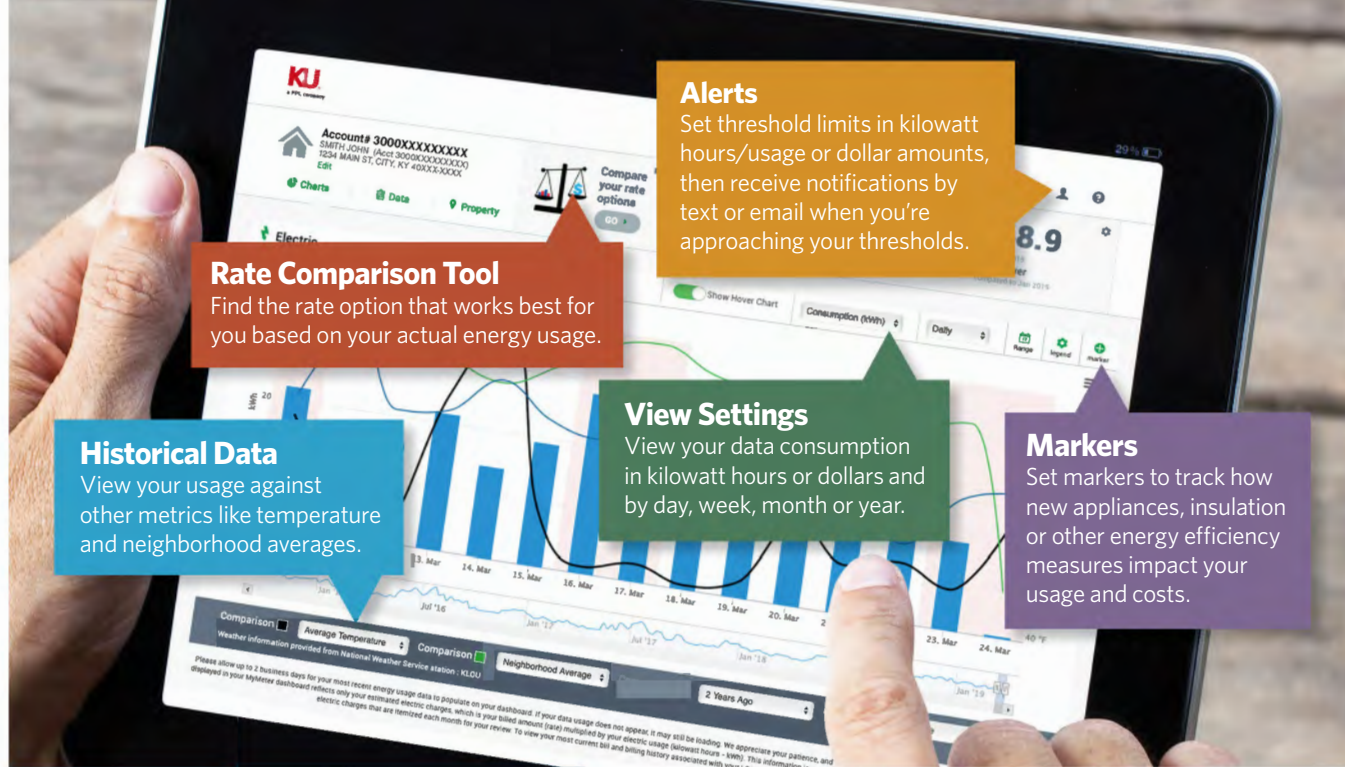
Your advanced meter will be installed within two weeks.

Expedite your installation by signing up today:

- Online at lge-ku.com/amp
- Or call 800.981.0600, press 1-4-2-4



It's smart, simple and available at no extra cost.



Alerts

Set threshold limits in kilowatt hours/usage or dollar amounts, then receive notifications by text or email when you're approaching your thresholds.

Rate Comparison Tool

Find the rate option that works best for you based on your actual energy usage.

Historical Data

View your usage against other metrics like temperature and neighborhood averages.

View Settings

View your data consumption in kilowatt hours or dollars and by day, week, month or year.

Markers

Set markers to track how new appliances, insulation or other energy efficiency measures impact your usage and costs.

While your basic meter records a running total of the energy you use, an **Advanced Meter** records energy usage data in **15-minute increments** and relays it to **LG&E several times a day**. You can access your usage info – and more – from an **online dashboard**.

Sign up today at lge-ku.com/amp.



1 Quality Street
Lexington, KY 40507

PRSR1 STD
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Question No. 6

Witness: David E. Huff / Jonathan S. Whitehouse

Q-6. Refer to the LG&E/KU Tariff Filings, Attachment 1, page 19 of 29.

- a. Provide separately for LG&E and KU the number of additional routers that will need to be installed, the cost of the routers (including installation), and whether that cost is included in the projected \$423 per meter as shown on page 16 of 29.
- b. For the household comparison option, explain whether the comparison to neighbors is to those with or without AMS meters.

A-6.

- a. The number of additional routers to be installed and costs are below. These costs are included in the projected \$423 per meter. 55 of the 71 routers referenced below are installed as of May 28, 2019. Please note that the amount shown below differs from the amount shown in response to Question No. 7 (incremental network equipment and incremental network installation) because the budget includes amounts for any additional equipment whether needed for RF Mesh expansion or damaged routers or collectors.

Company	# of Collectors	# of Routers	Cost of Infrastructure (including installation)
LG&E	0	0	\$0
KU	1	71	\$316,350

- b. The comparison to neighbors is to those with AMS meters.

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Question No. 7

Witness: David E. Huff / Jonathan S. Whitehouse

- Q-7. Refer to LGE&E/KU Tariff Filings, Attachment 1, page 21 of 29. Provide a detailed budget for the estimated total expenses for the 20,000-meter deployment. Specifically, provide the expenses that encompass the administration, CAPX, OPEX, and Miscellaneous expenses.
- A-7. The table below is the detailed budget for the table labeled "Estimated Total Expenses for 20,000 meter deployment", LG&E/KU Tariff Filings, Attachment 1, page 21 of 29. Please note that the budget estimates provided in this table are inclusive of the approved amounts in the table immediately preceding, "Advanced Metering Systems Approved Budget 2017-00441" as noted below. Also, all of these costs are inclusive in the projected \$423 per meter as shown on page 16 of 29 of LG&E/KU Tariff Filings, Attachment 1.

Estimated Total Expenses for 20,000 meter deployment							
	(\$1,000)	2019	2020	2021	2022	Total	
1	Administration included in Case 2017-00441	\$ 291	\$ 300	\$ 309	\$ 318	\$ 1,218	
Implementation CAPX							
2	Network Equipment included in Case 2017-00441	\$ 52	\$ 54	\$ 55	\$ 57	\$ 218	
3	Incremental Network Equipment	\$ 205	\$ 56	\$ 59	\$ 61	\$ 381	
4	Sub-Total Network Equipment	\$ 257	\$ 110	\$ 114	\$ 118	\$ 599	
5	Network Install included in Case 2017-00441	\$ 8	\$ 8	\$ 8	\$ 8	\$ 32	
6	Incremental Network Installation	\$ 160	\$ 4	\$ 4	\$ 4	\$ 172	
7	Sub-Total Network Install	\$ 168	\$ 12	\$ 12	\$ 12	\$ 204	
8	Cellular 2,000 3G Meter included in Case 2017-00441	\$ 351	\$ -	\$ -	\$ -	\$ 351	
9	Incremental Meters	\$ 1,913	\$ -	\$ -	\$ -	\$ 1,913	
10	Sub-Total Meter Equipment	\$ 2,264	\$ -	\$ -	\$ -	\$ 2,264	
11	Cellular Meter Installation included in Case 2017-00441	\$ 80	\$ -	\$ -	\$ -	\$ 80	
12	Incremental Meter Installation	\$ 170	\$ -	\$ -	\$ -	\$ 170	
13	Sub-Total Meter Install	\$ 250	\$ -	\$ -	\$ -	\$ 250	
14	IT Development Work included in Case 2017-00441	\$ 10	\$ -	\$ -	\$ -	\$ 10	
15	Incremental IT Development Work	\$ 152	\$ -	\$ -	\$ -	\$ 152	
16	Sub-Total IT Development Work	\$ 162	\$ -	\$ -	\$ -	\$ 162	
17	CAPX included in Case 2017-00441 (Lines 2, 5, 8, 11, 14)	\$ 500	\$ 61	\$ 63	\$ 65	\$ 690	
18	Incremental CAPX (Lines 3, 6, 9, 12, 15)	\$ 2,600	\$ 61	\$ 63	\$ 65	\$ 2,788	
19	CAPX Sub-Total (Lines 17, 18)	\$ 3,100	\$ 122	\$ 126	\$ 130	\$ 3,478	
Implementation OPEX							
16	Customer Education included in Case 2017-00441	\$ -	\$ -	\$ -	\$ -	\$ -	
17	Incremental Customer Education	\$ 749	\$ -	\$ -	\$ -	\$ 749	
18	Sub-Total Customer Education	\$ 749	\$ -	\$ -	\$ -	\$ 749	
19	Outside Services included in Case 2017-00441	\$ 98	\$ 99	\$ 97	\$ 98	\$ 392	
20	Incremental Outside Services	\$ 104	\$ 99	\$ 97	\$ 97	\$ 398	
21	Sub-Total Outside Services	\$ 202	\$ 198	\$ 194	\$ 196	\$ 790	
22	Maintenance of Equipment included in Case 2017-00441	\$ 5	\$ 5	\$ 5	\$ 5	\$ 20	
23	Incremental Maintenance of Equipment	\$ 5	\$ 5	\$ 5	\$ 5	\$ 20	
24	Sub-Total Maintenance of Equipment	\$ 10	\$ 10	\$ 10	\$ 10	\$ 40	
25	Incremental OPEX IT Implementation	\$ 222	\$ -	\$ -	\$ -	\$ 222	
26	OPEX included in Case 2017-00441 (Lines 16,19, 22)	\$ 103	\$ 104	\$ 102	\$ 103	\$ 412	
27	Incremental OPEX (Lines 17, 20, 23, 25)	\$ 1,080	\$ 104	\$ 102	\$ 103	\$ 1,389	
28	OPEX Sub-Total (Lines 26, 27)	\$ 1,183	\$ 208	\$ 204	\$ 206	\$ 1,801	
Miscellaneous - Program Evaluation							
29	Program Evaluation amount included in Case 2017-00441	\$ -	\$ 23	\$ -	\$ 24	\$ 47	
30	Incremental Program Evaluation amount	\$ -	\$ 23	\$ -	\$ 24	\$ 47	
31	Sub-Total Miscellaneous	\$ -	\$ 46	\$ -	\$ 48	\$ 94	
Summary							
	Admin (Line 1)	\$ 291	\$ 300	\$ 309	\$ 318	\$ 1,218	
	CAPX (Line 19)	\$ 3,100	\$ 122	\$ 126	\$ 130	\$ 3,478	
	OPEX (Line 28)	\$ 1,183	\$ 208	\$ 204	\$ 206	\$ 1,801	
	Miscellaneous (Line 31)	\$ -	\$ 46	\$ -	\$ 48	\$ 94	
	Total	\$ 4,574	\$ 676	\$ 639	\$ 702	\$ 6,591	