COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY UTILITIES COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC RATES, A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO DEPLOY ADVANCED METERING))))	Case No. 2020-00349
REGULATORY AND ACCOUNTING TREATMENTS AND ESTABLISHMENT OF A ONE YEAR SUR-CREDIT)))	
and		
ELECTRONIC APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC AND GAS RATES, A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO DEPLOY ADVANCED METERING INFRASTRUCTURE, APPROVAL OF CERTAIN REGULATORY AND ACCOUNTING TREATMENTS AND ESTABLISHMENT OF A ONE YEAP SUP CREDIT))))))	Case No. 2020-00350

DIRECT TESTIMONY OF JAMES OWEN ON BEHALF OF JOINT INTERVENORS

Tom FitzGerald Kentucky Resources Council, Inc. P.O. Box 1070, Frankfort, KY 40602 (502) 875-2428 FitzKRC@aol.com

Counsel for Joint Intervenors Mountain Association, Kentuckians For The Commonwealth, and Kentucky Solar Energy Society In Case No. 2020-00349 and

Metropolitan Housing Coalition, Kentuckians for the Commonwealth, and Kentucky Solar Energy Society in Case No. 2020-00350

1 Introduction

2

Q: Please state your name, title, and business address.

- 3 A: James Owen, Executive Director, Renew Missouri Advocates d/b/a Renew Missouri
 4 ("Renew Missouri"), 409 Vandiver Dr. Building 5, Suite 205, Columbia, MO 65202.
- 5 Q: Please describe your current position, your education, and background.

6 A: Renew Missouri is an advocacy group based in Missouri that appears before regulatory 7 agencies such as the Missouri Public Service Commission ("MPSC") as well as monitoring and providing comments on matters before the Kansas Corporation Commission. ("KCC"). 8 9 Our work involves engaging as intervenors on utility rate cases, applications for certificates 10 of convenience and necessity ("CCNs"), merger and acquisition, Accounting Authority 11 Orders ("AAOs"), and energy efficiency investment portfolios. We routinely engage in 12 workshops, providing comments and serving on panels before Commissioners, regulators, 13 and other stakeholders. Most recently, we have engaged in dockets involving co-generation 14 as well as utility responses to the COVID-19 crisis. I have provided testimony before these 15 agencies on general policy involving the generation, transmission, and distribution of 16 power. Attached as **Schedule JO-1** is a list of my case participation. We have also lent our 17 expertise and knowledge on legislative matters between the two states that includes issues 18 ranging from energy efficiency investments to securitization of debt held by utility 19 companies as well as community solar.

In regard to my background, I am an attorney by trade and was appointed as an Associate Circuit Court Judge prior to my experience in utility ratemaking. As far as my education goes, I obtained a law degree from the University of Kansas in Lawrence, Kansas as well

as a Bachelor of Arts in Business and Political Science from Drury University in
 Springfield, Missouri.

3 Q: What experience does Renew Missouri have in advocating for low-income ratepayers.

4 Renew Missouri is deeply engaged with obtaining policy results that provide access for A: 5 low-income residents to renewable energy and energy efficiency. Through our 6 representation of nationwide groups such as National Housing Trust ("NHT") and Energy 7 Efficiency for All ("EEFA"), Renew Missouri has secured energy efficiency programs for 8 all ratepayers as well as crafting on-bill financing tariff programs designed to aid low-9 income customers in making improvements to their living spaces. Additionally, Renew 10 Missouri has worked with utility companies to develop pilots to provide community solar 11 to low-income neighborhoods. We have worked to expand these efforts throughout 12 Missouri and Kansas.

13 Q: What work does Renew Missouri conduct in the field of energy policy?

14 A: In my role as Executive Director at Renew Missouri, I continue to provide information and 15 testimony on pieces of proposed legislation that may impact how utility regulators 16 approach energy efficiency and renewable energy. Most recently, Renew Missouri staff 17 and myself have been developing and offering educational programs on topics related to 18 energy law and policy in Missouri on topics including demand response aggregation, accounting authority orders, and our year-end update covering state and federal 19 20 rulemakings, PSC appeals, and energy efficiency/renewable energy updates. We have 21 provided nearly forty hours of continuing legal education credit over the past two years.

22 Q: Please summarize your professional experience in the field of utility regulation.

1 A: Before becoming Executive Director of Renew Missouri, I served as Missouri's Public 2 Counsel, a position charged with representing the public in all matters involving utility companies regulated by the State of Missouri. While I was Public Counsel, I was involved 3 4 in several rate cases, CCN applications, mergers, and complaints as well as other filings. 5 As Public Counsel, I was also involved in answering legislators' inquiries regarding 6 legislation impacting the regulation of public utilities.

7 **O**: Have you been a member of, or participant in, any workgroups, committees, or other 8 groups that have addressed electric utility regulation and policy issues?

9 A: In May 2016 I attended the National Association of Regulatory Utility Commissioners 10 ("NARUC") Utility Rate School. In the Fall of 2016, I attended Financial Research Institute's 2016 Public Utility Symposium on safety, affordability, and reliability. While I 11 12 was Public Counsel, I was also a member of the National Association of State Utility Consumer Advocates ("NASUCA") and, in November of 2017, the Consumer Council of 13 14 Missouri named me the 2017 Consumer Advocate of the Year.

15 Much of your experience is in Missouri and Kansas. What makes you qualified to **Q**: 16 testify for matters in Kentucky?

17 A: To begin, I provided testimony in the recently-decided rate case filed by Kentucky Power Company¹ where I spoke to the Commission on matters of rate increases, rate design (with 18 19 a focus on increased customer charges), ROE, energy efficiency, AMI infrastructure, and 20 the Company's proposed net metering tariff. Thanks to that work, I was able to dive into the nuances of utility ratemaking as it applies to the Kentucky Commonwealth. Beyond 21

¹ Kentucky Public Service Commission Case 2020-00174

this, my knowledge on these topics must be based on a foundation of work we've done in
 other states with a similar regulatory framework.

3 In regard to the way it regulates utilities, Kentucky is very similar to Missouri and Kansas. The three states contain wide swaths of rural areas that face economic challenges and 4 5 hardships in terms of population retention and the stability of the employment market. For 6 example, the structure of the Louisville Gas & Electric ("LG&E") and Kentucky Utilities 7 ("KU") service territories are remarkably similar of how Western Missouri's Evergy is 8 split up based on separate rate design. Evergy has two separate divisions – Evergy Metro 9 is the service territory that covers Kansas City and some of its surrounding suburbs while 10 Evergy West represent more rural areas to the east and north of the Kansas City 11 Metropolitan Area. More generally, each state has investor-owned utilities that are 12 vertically integrated and own all levels of their supply chain and have a monopoly on the 13 production and sale of power.

14

II. <u>Purpose and summary of testimony</u>

15 Q: What is the purpose of your testimony?

16 A: To respond to LG&E and KU's Application for Rate Increases and Tariff Adjustments. 17 Generally, I will respond to Company witness and President Paul W. Thompson as well as 18 Company Witness Kent Blake in regard to his summary of the rate increases sought. While 19 he focuses on the economic reality of these Companies, I want to focus on the economic 20 realities of the ratepayers and why these realities are concerning. Specifically, I will address 21 the issues of the Company's proposed rate tariff changes as a result of adjustments to the 22 customer service charge rate by Company witness Robert E. Conroy and William Steven 23 Seelye. Further, I provide a policy perspective on the ROE analysis provided by Company

witness Adrien M. McKenzie. I will also analyze how investments to a DSM can help
reduce the need for rate increases as testified by Company witness Blake as well as how
they can resolve other policy issues as raised by Company witness Eileen Saunders. I will
also review the advanced metering infrastructure (AMI) proposal outlined by Company
witnesses Seelye, Blake, Bellar, Saunders, Conroy, and Wolfe.

6 Q: You represent four different organizations in this testimony. Who are they and 7 what is their interest in this application?

A: I am testifying on behalf of the Mountain Association, Kentuckians For The
Commonwealth, the Metropolitan Housing Coalition, and the Kentucky Solar Energy
Association. I shall refer to them, when needed, as "The Coalition." While the
organizations are distinct with specific mission statements, their shared concerns focus on
protecting ratepayers from undue economic and regulatory burdens as well as ensuring all
ratepayers have equal access to cost-effective, clean energy throughout the KU and LG&E
service territories.

Q: What is your recommendation to the Kentucky Public Service Commission ("Commission") in this case?

A: The Commission should weigh all proposals made by the Companies with a focus on the economic hardship faced by its customers and specifically by how the current crisis involving COVID-19 has exacerbated this hardship. To that extent, I recommend that the Commission reject the Companies' excessive ROE request and that the current customer charge should remain unchanged. Further, any changes to rate design should be tied directly to any and all AMI improvements so that customers can actually modify their behavior to reduce their bills and lower their energy consumption. Additionally, the

Commission should require the Companies to engage in energy efficiency measures such as an on-bill financing tariff similar to the How\$martKY program used by rural electric cooperatives in Kentucky (and in early stages with investor-owned utilities in Missouri). This would not only help reduce customers' utility bills but would also drive down the need for additional measures that are currently driving the need for these utilities to come before the Commission every two years in order to seek rate increases.

7

III. <u>Regulatory Policy and Economic Considerations</u>

8 Q: Can you summarize the rate increases KU and LG&E are seeking in this matter?

9 A: Yes. According to summation provided by Company Witness Seeley in his testimony, "the
10 Companies are proposing an overall revenue increase of \$170,120,598 for KU, which
11 corresponds to a 10.36% increase, and a \$131,073,276, revenue increase for LG&E, which
12 corresponds to an 11.61% increase."

13 Q: Do you have any comment on the customer increases as described by the company?

A: Yes, in our own attempts to calculate the rate impact we weren't able to replicate the companies' figures for monthly impacts provided in the notice of an increase to residential
LG&E customer bills of \$11.74 per month (11.81%). KU customers would see an increase
of \$12.85 per month (10.67%). Our own calculations show a higher customer impact as
shown below:

KU Proposed Residential Rate Changes							
	Avg Monthly Bill current	Avg Monthly Bill proposed	% Increase		Annual Increase	Monthly Increase	
Meter fee	\$16.12	\$18.55	13.1%		\$29.20	\$2.43	
Usage charge	\$100.39	\$111.44	9.9%		\$132.65	\$11.05	
Total	\$116.51	\$129.99	11.6%		\$161.85	\$13.49	
Monthly Bill Increase	\$13.49	per month					
	Avg Monthly Bill	Avg Monthly					
	current	Bill proposed	% Increase				
Meter fee							
Usage charge							
Total							
Monthly Bill Increase	\$0.00	per month					
		Monthly					
Total Electric	Monthly current	proposed	% Increase				
	\$116.51	\$129.99	11.6%				

LG&E Proposed Residential Rate Changes					
		•		<u> </u>	
	Avg Monthly Bill	Avg Monthly		Annual	Monthly
	current	Bill proposed	% Increase	Increase	Increase
Meter fee	\$13.69	\$15.82	13.5%	\$25.55	\$2.13
Usage charge	\$82.95	\$93.71	11.5%	\$129.17	\$10.76
Total	\$96.63	\$109.53	13.3%	\$154.72	\$12.89
Monthly Bill Increase	\$12.89	per month			
	Avg Monthly Bill	Avg Monthly			
	current	Bill proposed	% Increase		
Meter fee	\$19.77	\$23.73	20.0%	\$47.45	\$3.95
Usage charge	\$39.67	\$45.94	15.8%	\$75.27	\$6.27
Total	\$59.44	\$69.66	17.2%	\$122.72	\$10.23
Monthly Bill Increase	\$10.23	per month			
		Monthly			
Total Electric + Gas:	Monthly current	proposed	% Increase		
	\$156.07	\$179.19	14.8%		Ì

2 3

3

4 Q: In a nutshell. what is your professional opinion about these increases?

5 A: The ratepayers of KU and LG&E simply cannot afford any rate increase at this time, let 6 alone a significant rate increase as proposed. As I will outline below, there are unique 7 challenges faced by the residents of these service territories. The poverty rate is high. Incomes are low, which means the energy burden imposed upon households in LG&E and KU service territories are already consequential. These conditions have been exacerbated by the COVID-19 pandemic due to a rise in unemployment rates throughout the Companies' service territories. This has also led to a rise in evictions, which is in part due to tenants and home-owners unable to afford their utility bills.

6 This is the reality faced by Kentuckians. While I am aware of the financial considerations 7 the Companies set forth in their direct testimony, the Commission should also be aware of 8 the circumstances of those being asked to pay more for basic, necessary services during a 9 period of economic uncertainty. Company witness Kent Blake, on Page Two of his 10 testimony, admits that the economy is forecasted to return to pre-COVID numbers at and 11 around the middle part of 2022. Or another year and a half. There is already a question of 12 whether customers can afford their utility bills at current rates. If this proposed increase is 13 approved, the downturn caused by COVID-19 could be extended and worsened as a result 14 of what is being sought in this rate case.

15 Q: What perspective do you use to provide these recommendations?

A: While the direct testimony from the Companies focuses on the state of the utility, I want to share with you the perspective of ratepayers in Kentucky – specifically residential customers. According to the Companies' website², there are 558,000 electric customers in KU's service territory in over seventy-seven counties. LG&E serves 329,000 gas customers and 418,000 electric customers in over sixteen different counties. While KU and LG&E service territories do not fully capture the entire population in these counties, there is value in looking at the utility territory population as a whole given many of the counties have a

² lge-ku.com/ourcompany

high concentration of KU and LG&E customers. As represented by Map 1, the population
 of the counties serviced by KU/LG&E utilities covers a large swath of Kentucky, including
 two major population centers - Louisville and Lexington.



4

5

Map 1: Data compiled from 2019 Census Data using Tableau Public³

6 Q: What is the regulatory principle you regard in reviewing this work?

A: The Companies and its ratepayers are partners in the regulatory compact. In return for
protected monopoly status - a status which divests LG&E and KU of most fundamental
business risks inherent in the free-market system, such as competing in the marketplace for
willing customers - the utility is provided a reasonable opportunity to recover its costs and
earn a fair and reasonable return on investment⁴. In a partnership, one expects the parties
will share the partnership's benefits as well as its detriments – the partners' fortunes are

³ https://www.census.gov/quickfacts/fact/table/US/PST045219

⁴ Bluefield Waterworks and Improvement Co. v. Public Service Commission of West Virginia, 262 U.S. 679, 692 (1923)

1		necessarily linked. When looking at all the relevant factors in this case, and assessing the
2		proper balance of those factors, the reasonableness of any rate increase is necessarily called
3		into question.
4	Q.	How is the best way to analyze the overall economic well-being of these service
5		territories?
6	А.	It is a known correlation that poverty rates are related to the overall health of the
7		economy. As the economy falls, so do opportunities for employment and income
8		growth. Weak labor markets and lower-income levels tend to keep families living in
9		poverty and heighten unemployment levels. High poverty and unemployment rates in
10		Kentucky continue to plague the state. Kentucky is ranked 4 th in the nation for the highest
11		poverty levels with 16.3% of the state's population living in poverty, behind Mississippi,
12		Louisiana, and New Mexico. ⁵
13	Q:	What are the specific employment and income levels for the KU service territory?
14	A:	Based on data from 2019, the average median household incomes in the KU service
15		territory is \$46,632. ⁶ Compared to the 2019 national median household income of
16		\$68,703, ratepayers in the KU service territory are earning on average \$22,071 -or
17		32% - less than everywhere else in the country. Only three counties within the service
18		territory are earning at or above the median household average. ⁷ Not a single rural county
19		in KU's service territory earns the national median household income. Those that come the
20		closest are Lyon and Trimble counties, each falling \$15,703 short of this average national

 ⁵ https://talkpoverty.org/indicator/listing/poverty/2020
 ⁶ Calculations based on information provided by: https://datacommons.org/place/geoId/21001?topic=Economics
 ⁷Calculations based on information provided by https://datacommons.org/place/geoId/21001?topic=Economics

1	number.8 The lowest-earning county in the territory, Lee, brings in a median household
2	income of \$25,000.9 It is frequently listed as one of the poorest counties in the United States
3	with more than a third of the county's population living in poverty. The average poverty
4	rate for KU's service territory alone is above that of the rest of the state at 17.35%. ¹⁰
5	As seen in MAP 2, the percentage of the population living in poverty is
6	exceptionally high in southern Kentucky. In five rural and micropolitan counties
7	("micropolitan" being defined as areas with populations over 10,000 but less than 50,000):
8	Clay, Bell, Harlan, Knox, Lee, and McCreary, the poverty level is above 30%. ¹¹ In fact,
9	Bell
10	(30.3%) and Harlan (31.8%) counties have incredibly high poverty rates, almost three
11	times as high as the national average $(10.5\%)^{12}$. Bell and Harlan counties are primarily
12	served by KU. ¹³ Increasing the utility rates creates an unjustifiable financial burden for
13	customers living in some of the poorest counties in America. Given the
14	disproportionally impacts of COVID-19, the increases sought here would ensure these
15	customers can never escape their current conditions.
16	Map 2: Data compiled from 2019 Census Data using Tableau Public 13 ¹⁴

https://datacommons.org/place/geoId/21001?topic=Economics

⁹ Calculations based on information provided by

https://datacommons.org/place/geoId/21001?topic=Economics

¹⁰ Based on calculations from US Census Data

https://www.census.gov/quickfacts/fact/table/adaircountykentucky/PST045219

¹¹ Calculations based on information provided by

⁸ Calculations based on information provided by

https://datacommons.org/place/geoId/21001?topic=Economics

¹² Based on calculations from US Census Data.

https://www.census.gov/quickfacts/fact/table/adaircountykentucky/PST045219

¹³ https://psc.ky.gov/agencies/psc/images/Electric_Service_Areas_Legal_Size_Map.pdf

¹⁴ https://www.census.gov/library/publications/2020/demo/p60-270.html



1		
-		

2 Q: What are the rates of unemployment in the KU service territory?

3	A:	In 2019, the last time KU and LG&E were awarded changes to their rates and rates
4		structure, unemployment rates were the lowest they had been in decades. Kentucky's
5		unemployment rate was 4.3% and the national unemployment rate was 3.5%. ¹⁵ However,
6		for counties in KU's service territory, this rate was much higher. On average, the
7		unemployment rate was 7.4% for KU service territory. The areas most affected by
8		unemployment are micropolitan areas, at a rate of 7.64%. Metropolitan areas saw a rate of
9		7% and rural areas a rate of 6.95%. These rates are approximately twice as high as the
10		national unemployment rate.
1		As seen in MAP 3, higher unemployment percentages are predominantly located in

12 southeastern Kentucky counties. Harlan County had a 16.1% unemployment rate in 2019.

¹⁵https://www.bls.gov/opub/mlr/2020/article/job-market-remains-tight-in-2019-as-theunemployment-rate-falls-to-its-lowest-level-since-1969.htm



Map 3: 2018 Data¹⁶ 2

3	Q:	What are the unemployment and income levels for LG&E's service territory?
4	A:	In 2019, at a time when unemployment was the lowest it had been in decades,
5		Kentucky's unemployment rate was 4.3% and the national unemployment rate was
6		3.5%. In 2019, LG&E's service territory, the average unemployment rate was 3.825%.
7		In light of the COVID-19 pandemic, all LG&E counties experienced an increase in
8		unemployment. The average unemployment rate for LG&E customers is for 2020
9		increased to 6.57%. ¹⁷ The maps below compare the unemployment rate in 2019 to the
10		unemployment rates in 2020 for LG&E service counties.

 ¹⁶ https://datacommons.org/place/geoId/21
 ¹⁷ Based on Calculations from US Census Data https://datacommons.org/place/geoId/21001?topic=Economics



2 The 2019 average poverty rate for LG&E service territory was 10.45%, which is approximately equal to the national poverty rate and lower than Kentucky's overall 3 average of 16.3%.¹⁸ However, when isolating income data from households in LG&E 4 service territory, an interesting narrative emerges. Based on data from 2019, the average

¹⁸ Based on calculations from US Census Data https://www.census.gov/quickfacts/fact/table/adaircountykentucky/PST045219

1	median household income in the LG&E service territory is \$64,429. ¹⁹ Compared to the
2	2019 national median household income of \$68,703, Kentuckians in the LG&E's service
3	territory were earning on average \$4,274, or 6% less ²⁰ . In fact, only one county, Oldham,
4	the home to the wealthiest and most educated in the state, earns above the median
5	household income with an average median household income of \$99,000. Excluding
6	Oldham from the calculations, the average median household income in the area would
7	be \$58,667, about \$10,000, or 15%, less than the national average. ²¹
8	While there are more affluent portions of the LG&E territory compared to KU, there are
9	still significant challenges facing these customers even under optimal conditions. Below
10	is a map showing the percent of people living in poverty in LG&E's territory:



 ¹⁹ Calculations based on information provided by https://datacommons.org/place/geoId/21001?topic=Economics
 ²⁰ Calculations based on information provided by https://datacommons.org/place/geoId/21001?topic=Economics
 ²¹ Calculations based on information provided by https://datacommons.org/place/geoId/21001?topic=Economics

1 Q:

How has COVID-19 Impacted these economic conditions for Kentucky customers?

- A: Between February 2020 and June 2020, the Kentucky workforce was reduced by
 approximately 158,000 people.²² While jobs are slowly recuperating, the employment level
 is nowhere near what it was pre-pandemic.
- 5 As of July 2020, manufacturing alone -Kentucky's largest employment sector- was down 6 by 18,400 jobs from the previous year. Only one sector, construction, displayed an 7 increase from its previous year's employment. Previously existing high percentages of 8 poverty combined with COVID-19's economic fallout have increased hardships for already 9 struggling communities.²³

10

Q: Has COVID-19 affected the economic well-being of all customers the same way?

11 **A:** No. COVID-19 economic impacts are most severe for low-income adults and people of 12 color. A report from Pew Research Center finds that half of adults who lost jobs due to 13 COVID-19 are still unemployed and that financial hardship is much more severe for those 14 who lost their jobs. Those facing the highest rates of financial hardship include lower-15 income households and Black and Hispanic households. Unemployment continues to affect 16 many adults; 15% of adults have reported that they personally became unemployed because 17 of COVID-19. Of these, half remain unemployed. Forty-three percent of lower-income 18 Americans have been able to return to work. This can be compared to 58% of those in the 19 middle and high-income groups. Many people who remained employed still took a 20 financial hit amid COVID-19; 21% of adults who did not lose their job experienced a cut

²² https://kystats.ky.gov/KYLMI/PressRelease?id=d6895d68-8fb4-4ab6-a87d-5b0d669a042f

²³ https://kystats.ky.gov/KYLMI/PressRelease?id=d6895d68-8fb4-4ab6-a87d-5b0d669a042f

in pay.²⁴ These economic impacts disproportionally harm low-income Kentuckians, of
 which there is a high percentage in the utilities service territories.

3 Q: How can we analytically measure matters of poverty and unemployment?

4 A: There are several metrics to measure these impacts - from social aid programs, such as 5 Unemployment Insurance ("UI") and Supplemental Nutrition Assistance Program ("SNAP"), that reveal COVID- 19's impact on state economies. New UI claims indicate 6 7 continued loss of hours and employment for many in the state. Kentucky offers its citizens 26 weeks of regular UI benefits. Additional assistance is currently offered through the 8 9 federally funded Pandemic Emergency Unemployment Compensation ("PEUC") program 10 and for some, Pandemic Unemployment Assistance ("PUA"). However, both PEUC and PUA are set to expire on March 14th of 2021 unless Congressional action is taken.²⁵ 11

12 The following graphic displays the weekly jobless claims for initial regular state unemployment and PUA between June 2020 and February 2021.²⁶ Claims to regular state 13 14 unemployment are denoted in dark blue, while claims to PUA are denoted in light blue. Not 15 surprisingly there continues to be a large number of jobless claims within the state. 16 Participation in SNAP is highly responsive to shifts in the state economy. Since the 17 program is structured to assist people with net incomes below the poverty line (\$26,200 for a family of four), it is a useful metric to evaluate how Kentucky's low-income families are 18 faring in the current economy. In 2019, the number of Kentuckians receiving SNAP 19

²⁴ <u>https://nlihc.org/resource/new-survey-finds-covid-19-economic-impact-most-severe-low</u> income-adults-and-people-color

²⁵ https://kypolicy.org/tracking-the-economic-fallout-of-covid-19-in-kentucky/

²⁶ https://kypolicy.org/tracking-the-economic-fallout-of-covid-19-in-kentucky/

benefits was 541,000, or 12%.²⁷ As of January 2021, that number is 624,825, or 14%.²⁸
Because of the longevity of high unemployment claims, many folks are unable to pay bills,
racking up large amounts of debt. Raising utility rates for individuals already behind on
bills creates a deeper financial trench for people to escape.



5

6 Q: Have these factors had an impact on disconnections of utility customers?

A: To a degree. On March 16, 2020, the Commission issued an Order directed at utilities to
temporarily suspend disconnections for non-payment, waive late payment charges, and
offer payment plans for unpaid balances. Certainly, this action by the Commission helped
keep disconnection numbers low during the first six months of the pandemic. This
moratorium on disconnection for nonpayment was lifted beginning October 20, 2020 and
the moratorium on late payment charges for residential customers was lifted on
December 31, 2020.

²⁷ <u>https://www.cbpp.org/research/food-assistance/a-closer-look-at-who-benefits-from-snap</u> state by-state-fact-sheets#Kentucky

²⁸ 22 https://kypolicy.org/tracking-the-economic-fallout-of-covid-19-in-kentucky/

A survey of Kentucky utility consumers found a deficit of \$75 million towards all utility
 payments as of October 2020, although that figure was estimated to be closer to \$150
 million by the end of the year. In Louisville alone, 28,000 of LG&E's customers were
 going to have their utility services disconnected after the state moratorium was lifted.

5 This is almost double the amount (15,000 disconnections) at this same time in 2019.

6 Q: Regardless of disconnections, what are the numbers involving the burden energy bills 7 place on already-strained households?

8 Increasing utility bills to already hurting families and disenfranchised communities will A: 9 add an unnecessary burden to those who are most vulnerable. There is a correlation 10 between high energy burdens and eviction. With the disastrous combination of the COVID-11 19 pandemic and the already existing high percentage of poverty in the state, adding 12 increased utility bills will only stand to hurt Kentucky customers and possibly increase 13 eviction rates. Home energy is a crippling financial burden for low-income Kentucky 14 households as seen in Table 1. Kentucky households with incomes below 50% of the 15 Federal Poverty Level pay 30% of their annual income simply for their home energy bills. 16 Home energy unaffordability, however, is not only the province of the very poor. Bills for 17 households with incomes between 150% and 185% of Poverty take up 7% of income. Kentucky households with incomes between 185% and 200% of the Federal Poverty Level 18 have energy bills equal to 6% of income.²⁹ 19

20 Table 1. Home Energy Affordability Gap - 2019³⁰

Poverty Level	Home Energy Burden	
Below 50%	30%	
50-100%	16%	

²⁹ Kentucky 2019 HEAG Fact Sheet

³⁰ Kentucky 2019 HEAG Fact Sheet

100%-125%	11%
125%-150%	9%
150%-185%	7%
185%-200%	6%

The number of households facing unaffordable home energy burdens is staggering. 2 3 According to the most recent five-year American Community Survey, nearly 135,000 Kentucky households live with income at or below 50% of the Federal Poverty Level and 4 face a home energy burden of 30%. And more increases than 176,000 additional Kentucky 5 households live with incomes between 50% and 100% of the Federal Poverty Level and 6 face a home energy burden of 16%.³¹ In addition, high energy burdens in Kentucky fall in 7 8 the Appalachian region, which has higher rates of poverty in comparison to the rest of the state.³²The Federation of Appalachian Housing Enterprises commissioned a report on the 9 10 energy cost burden in persistent poverty counties in central Appalachia. It found that 11 homeowners in the Appalachian region of Kentucky bear an energy burden of 41.5-57.7% 12 and renters in the region bear an energy burden of 25.5-30%. This is due in part to substandard housing that requires more energy to heat or cool.³³ 13

14 Q: What are the specific numbers involving energy burden in these service territories?

15 16 **A:** Households located in LG&E service territory with incomes below 50% of the Federal Poverty Level pay 31% of their annual income simply for their home energy bills.³⁴ The

³¹ Ibid

³² https://fahe.org/appalachian-

poverty/#:~:text=The%20state%20with%20the%20worst,the%20rest%20of%20the%20state.

³³ https://fahe.org/a-snapshot-of-energy-cost-burden-in-persistent-poverty-counties-in-central-appalachia/

³⁴ Kentucky 2019 HEAG Fact Sheet

national average energy burdens for low-income households is 8.6%.³⁵ LG&E low-income 1 2 households' energy burdens are more than three times as high as the nation's average. However, home energy burdens are not only experienced by the poor. Bills for LG&E 3 customers with incomes between 150% and 185% of Poverty take up an average of 7.4% 4 of income.³⁶ LG&E households with incomes between 185% and 200% of the Federal 5 Poverty Level have energy bills equal to 6.4% of income.³⁷ The national average energy 6 burden for non-low-income households is 3%.³⁸ LG&E customers spend twice as much on 7 their energy compared to the rest of the nation. Increasing the rates for all households, 8 9 regardless of income, should be a non-issue when so many customers have extreme energy 10 burdens. A series of maps showing the various energy burdens are included below:

³⁵ https://www.energy.gov/eere/slsc/low-income-community-energy-

solutions#:~:text=According%20to%20the%20U.S.%20Department,which%20is%20estimated%20at%203%25.

³⁶ Kentucky 2019 HEAG Fact Sheet

³⁷ Kentucky 2019 HEAG Fact Sheet

³⁸ https://www.energy.gov/eere/slsc/low-income-community-energy-

solutions#:~:text=According%20to%20the%20U.S.%20Department,which%20is%20estimated%20at%203%25.



2 **Q**: You mentioned our current economic crisis and its impact on people of Color. Can

3 you elaborate on this?

1

4	A:	The COVID-19 crisis and economic fallout disproportionally affects disenfranchised
5		groups such as Black and Indigenous communities. Black families in Kentucky have the
6		lowest median income of any racial group in Kentucky at \$30,400.39 Though Black
7		households are more likely to be in the metro areas of Kentucky, such as Jefferson County ⁴⁰
8		and not the Appalachian region, which has the highest overall energy burden,
9		the energy burden upon Black Kentucky families is disproportionate in comparison to

the energy burden upon Black Kentucky families is disproportionate in comparison to

³⁹ https://statisticalatlas.com/state/Kentucky/Household-Income

⁴⁰ https://statisticalatlas.com/state/Kentucky/Race-and-Ethnicity

1 their white neighbors.

2 A report from the American Council for an Energy-Efficient Economy (ACEEE) found that nationwide the median energy burden for Black households is 43% higher than for 3 non-Hispanic white households⁴¹. These communities are more likely to have high rates of 4 5 underlying health concerns, lack health insurance or access to testing, and members of 6 these communities are more likely to work in the service industry or essential worker roles that do not allow them to work remotely.⁴² These factors could contribute to drastic changes 7 in income and increase the energy burden in Black communities. Energy burdens in 8 9 Kentucky inordinately impact disenfranchised communities and households below the 10 poverty line. There is a high percentage of vulnerable communities in the utilities' service 11 territories that experience increased energy burdens, higher rates of unemployment, and 12 who are already suffering due to the COVID-19 pandemic. Individuals that live paycheck 13 to paycheck cannot afford their utility bills to increase and Kentuckians are not prepared 14 or able to take on additional financial burdens.

The economic situation for this part of the state is challenging and would only be extended and compounded by increased rates, increased customer charges, and impediments placed on customers trying to generate their own on-site energy. This situation will only worsen over the next few years as a result of the impact of COVID-19 on the KU and LG&E service territory.

20

Q: Does this cause any concerns for you in terms of evictions and disconnections?

⁴¹ In regards to the definition of "energy burden", I use the Department of Energy's understanding that this represents the portion of gross household income spent on utility bills."

⁴² https://www.aceee.org/sites/default/files/pdfs/u2006.pdf

1 A: Very much so. As unemployment rates continue to hover at around 10%, there is 2 cause for concern regarding evictions and eviction filings. Analysis of 2020 U.S. Census 3 data estimates that 211,000 Kentuckian renters are unable to pay rent and are at risk of eviction. Renter households that are unable to pay rent and are at risk of eviction accounts 4 5 for 42.24% of total renter households in Kentucky. The total estimate in the shortfall of rent is \$226,000,000.43 6 7 While Kentucky has issued its own eviction moratorium order in concert with a federal eviction order from the CDC (now being appealed after being ruled un-Constitutional), 8 9 that extension ended on December 31st. As the CDC order is now no longer in effect and 10 the likelihood of a new state moratorium is uncertain, it is calculated that more than 11 75,000 Kentuckians could be facing eviction at the end of March. Further, an estimated 12 101,000 Kentuckians, or 12% of renters, are behind on rental payments. According to the calculations from US Census data, Kentuckians will have accumulated a rent shortfall 13 14 between \$149 million and \$266 million as of January 2021. 15 In September 2020, Kentucky allocated \$15 million of its CARES Act funding towards a 16 rental assistance fund, "Healthy at Home Eviction Relief Fund." The fund was temporarily depleted and stopped taking new applications from November 5th of 2020 to 17 February 15th of this year. On February 15th, the program was relaunched with an 18 19 additional \$297 million in funding. Even with government assistance, approximately 950 20 evictions have been filed in Jefferson County in 2021. In Fayette County, the more than 21 1,400 evictions have been filed since last August.

⁴³ Data compiled from the website: https://www.census.gov/data-tools/demo/hhp/#/?measures=FJR

1 The mayors of Louisville and Lexington, the major cities in Jefferson and Fayette county 2 respectively, have been facing immense pressure to issue a local eviction moratorium, but 3 have so far denied.

4 Additionally, the Jefferson County Court is under scrutiny for failing to grant leeway to 5 tenants facing eviction. Currently, a class action lawsuit has been filed against the 6 Jefferson County Court for ordering 644 people to vacate their residents after they failed 7 to show up for a remote hearing in cases where the parties were allegedly supplied with 8 the wrong Zoom information. Supplying these parties with incorrect information would 9 constitute a violation of due process rights. Further, holding proceedings via Zoom rests 10 on the presumption that parties have access to reliable internet service. It might be hard to 11 make this presumption given these same people facing eviction may not have electricity 12 due to disconnected service.

Q: Why does this information matter in a utility rate case filed during the COVID-19 pandemic?

15 Populations which have the least ability to respond to the economic catastrophe caused A: 16 by COVID-19 are the same population that is being hardest hit with the public health and 17 economic consequences. The economic hardship is not simply caused by the loss of jobs, 18 though that is a major part of it. The hardship is caused by the loss of income, which 19 includes loss of jobs, a reduction of hours, and a reduction of work-related income. Since 20 lower-income, low-wage employees also are the least likely to have paid leave time, not 21 only personal illness, but also family illness requiring workers to take time off to be 22 caretakers, suffer adverse economic impacts. Substantial research shows that one 23 consequence of these economic harms is the inability to pay monthly bills, including

1		utility bills. National research ⁴⁴ quantifies the inability to pay utility bills in particular.
2		Earlier this year, a survey found, since the beginning of the COVID-19 pandemic:
3		• 25% of respondents indicated negative job experiences as a result of the pandemic;
4		9% had lost their jobs, 10% had their hours reduced, and 6% were furloughed without
5		pay.
6		• 15% of respondents lost their health insurance and an additional 10% had their health
7		insurance benefits reduced.
8		• Nearly 20% of respondents indicated that they were not paying their rent or mortgage
9		at all, and an additional 9% indicated that they were making only partial payments.
10		• About 40% of respondents indicated that it had harmed their ability to seek medical
11		care.
12		• 26% of respondents indicated that it had harmed their ability to feed their family.
13		Due to the nature of low wage employment, these customers find it difficult, if not
14		impossible, to avoid the economic crisis that has arisen due to COVID-19.
15	Q:	What should the Commission do with this information and perspective?
16	A:	In short, the Commission should be looking at the case filed by the Companies while being
17		mindful of the specific hardships of this time on Kentuckians.
18		Conditions in Kentucky were tough before the COVID pandemic. They are far worse now
19		and all factors indicate conditions are only going to deteriorate as the economic fallout
20		becomes more fully realized with disconnections and evictions looming. Seeking large rate

⁴⁴ Indiana University's Survey of Household Energy Insecurity in Time of COVID dated June 10th of 2020.

increase with a significant ROE request and an increase to fixed customer charges can only
 exacerbate this situation.

3 IV. <u>Return on Common Equity (ROE)</u>

4 Q: As a reminder, what is the ROE being sought by the Company in this case?

A: According to the testimony of Company witness Adrien McKenzie, KU and LG&E are
entitled to a 10% ROE. It is important to note, as witness McKenzie notes, she is the same
witness Kentucky Power Company ("KPC") employed for their rate case last year where a
10.3% ROE was recommended by that Company.

9 **Q**:

Do you have an opinion on this request?

10 A: Yes, the ROE requested by the Companies is too high and is focused too much on the 11 ability to draw capital and not on how this will affect ratepayers in their service territory. 12 While witness McKenzie says this ROE analysis reflects current economic trends, it does 13 not reflect the challenges faced by Kentucky ratepayers as we have gone into great detail 14 in this testimony already. Nor is the recommendation consistent with ROE awards around 15 the country as well as the ROE determination in the Commission's ruling on the KPC case 16 just a few months ago. Witness McKenzie's recommendation was rejected in favor of a 17 lower ROE of 9.3%.

18 Q: Based on your research, what should the PSC contemplate for an ROE for these 19 companies?

- A: Based solely on trends around the country for vertically-integrated utilities, I believe an
 ROE between 9.2 to 9.3% is fair and reasonable.
- 22 Q: From a policy perspective, how do you examine an ROE?

1 A: I am not holding myself out as a technical expert on ROE. However, I can look at how the 2 law guides decisions on ROE calculation so that's where I like to start. To be clear, the 3 Commission is not bound to apply any particular formula in the determination of a just and reasonable rate. The U.S. Supreme Court in *Bluefield Waterworks and Improvement Co.* 4 5 v. Public Service Commission of West Virginia, 262 U.S. 679, 692 (1923) has provided 6 guidance on what is a just and reasonable rate: "What annual rate will constitute just 7 compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts." 8

9 That same case also provides the basis for what is a just and reasonable rate of return for a 10 regulated utility: "A public utility is entitled to such rates as will permit it to earn a return 11 on the value of the property which it employs for the convenience of the public equal to 12 that generally being made at the same time and in the same general part of the country on 13 investments in other business undertakings which are attended by corresponding risks and 14 uncertainties; but it has no constitutional right to profits such as are realized or anticipated 15 in highly profitable enterprises or speculative ventures. The return should be reasonably 16 sufficient to assure confidence in the financial soundness of the utility and should be 17 adequate, under efficient and economical management, to maintain and support its credit 18 and enable it to raise the money necessary for the proper discharge of its public duties. A 19 rate of return may be reasonable at one time and become too high or too low by changes 20 affecting opportunities for investment, the money market and business conditions 21 generally."

Further, the U.S. Supreme Court in *Federal Power Commission v. Hope Natural Gas Company*, 320 U.S. 591, 603 (1944), has stated: "'[R]egulation does not insure that the

1		business shall produce net revenues.' But such considerations aside, the investor interest
2		has a legitimate concern with the financial integrity of the company whose rates are being
3		regulated. From the investor or company point of view, it is important that there be enough
4		revenue not only for operating expenses but also for the capital costs of the business. These
5		include service on the debt and dividends on the stock. By that standard, the return to the
6		equity owner should be commensurate with returns on investments in other enterprises
7		having corresponding risks. That return, moreover, should be
8		sufficient to assure confidence in the financial integrity of the enterprise, so as to
9		maintain its credit and to attract capital."
10		Determining ROE is one of the most contentious issues in any rate case but, like almost
11		everything with utility regulation, requires a balance between the needs of the utility and
12		the interests of the public.
13	Q:	Does the request by KU and LG&E provide such a balance as required by law?
14	A:	No. As witness McKenzie testifies, the primary reason the Companies seek this 10% ROE
15		is to attract capital to their investments. Again, this is only a portion of the formula required
16		by law which states "(a) reasonable return on equity, as developed by the U.S. Supreme
17		Court is: (1) adequate to attract capital at reasonable terms, thereby enabling the utility to
18		provide safe and reliable electric service; (2) sufficient to ensure the Companies' financial
19		integrity; and (3) commensurate with returns on investments in enterprises having
20		corresponding risks."45 As proposed, the ROE sought by KU and LG&E only meets one

⁴⁵ Bluefield Waterworks and Improvement Co. v. Public Service Commission of West Virginia, 262 U.S.
679(1923); Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591 (1944).

1 of the required criteria. Inherent in setting a just and reasonable rate is a requirement for 2 the Commission to make rates as affordable as possible for the ratepayers without causing detriment to the utility. To accomplish this, it is crucial that the Commission keep ROE as 3 4 low as reasonably possible. Because the Commission must balance the interests of the 5 customers and the utility, an ROE that awards shareholders one dollar more than that 6 minimum amount which is required to provide a fair opportunity to earn a reasonable return 7 on investment is an unjust and unreasonable ROE. The effect of ROE on the customers and 8 the affordability of rates in this case is staggering.

9

Q: How does the ROE request compare with other utilities around the country?

A: According to reporting by S&P Global on this topic⁴⁶, the Companies' request would
exceed the median and average ROE issued by public utility commissions to electric
utilities from around the country. In fact, only three states – California, Iowa, and Virginia
– have awarded a utility with an ROE of 10% or more. The range across the country for
the full year of 2019 went from 8.25% to 10.42% with an average of 9.55% and a median
of 9.45%.

16 This tightens as the analysis focuses on utility ROE's in states with a vertically-integrated 17 market structure. This range went from 9.25% to 10.02% with an average of 9.67% and a 18 median of 9.70%. It will probably surprise no one reading this testimony that the lowest 19 ROE in this category was awarded by the Kentucky Commission to Duke Energy 20 Kentucky, at 9.25%. As an illustrative point, we have included a graph from the Regulatory

⁴⁶ Electric ROE Authorizations Drift Lower in H1'20 as Virus Worries Continue https://www.spglobal.com/marketintelligence/en/news-insights/research/electric-roe-authorizationsdrift-lower-in-h1-20-as-virus-worries-continue

1 Research Group that accompanied the research we rely upon and replicated it below in

2 **Graphic JO-5 - ROE of Electric IOU's in 2020:**

H1'20 electric return on equity authorizations

Vertically integrated cases		Date of		
Companies	State	decision	ROE (%)	Decision type
Interstate Power and Light Co.	IA	01/08/20	10.02	Settled
PacifiCorp	CA	02/06/20	10.00	Fully Litigated
DTE Electric Co.	MI	05/08/20	9.90	Fully Litigated
Indiana Michigan Power Co.	MI	01/23/20	9.86	Settled
Virginia Electric and Power Co.	NC	02/24/20	9.75	Settled
Indiana Michigan Power Co.	IN	03/11/20	9.70	Fully Litigated
Duke Energy Indiana, LLC	IN	06/29/20	9.70	Fully Litigated
Southwestern Public Service Co.	NM	05/20/20	9.45	Settled
Avista Corp.	WA	03/25/20	9.40	Settled
Public Service Co. of Colorado	CO	02/11/20	9.30	Fully Litigated
Duke Energy Kentucky, Inc.	KY	04/27/20	9.25	Fully Litigated
Average			9.67	
Median			9.70	
Delivery only cases				
Fitchburg Gas and Electric Light Co.	MA	04/17/20	9.70	Settled
Rockland Electric Co.	NJ	01/22/20	9.50	Settled
CenterPoint Energy Houston Electric, LLC	TX	02/14/20	9.40	Settled
AEP Texas Inc.	TX	02/27/20	9.40	Settled
Liberty Utilities (Granite State Electric) Corp.	NH	06/30/20	9.10	Settled
Consolidated Edison Co. of New York, Inc.	NY	01/16/20	8.80	Settled
Central Maine Power Co.	ME	02/19/20	8.25	Fully Litigated
Average			9.16	
Median			9.40	
Limited-issue rider cases				
Appalachian Power Co.	VA	02/25/20	10.42	Fully Litigated
Virginia Electric and Power Co.	VA	02/18/20	10.20	Fully Litigated
Virginia Electric and Power Co.	VA	02/03/20	10.20	Fully Litigated
Virginia Electric and Power Co.	VA	02/03/20	10.20	Fully Litigated
Appalachian Power Co.	VA	05/21/20	9.42	Fully Litigated
Virginia Electric and Power Co.	VA	02/03/20	9.20	Fully Litigated
Virginia Electric and Power Co.	VA	02/03/20	9.20	Fully Litigated
Virginia Electric and Power Co.	VA	03/20/20	9.20	Fully Litigated
Virginia Electric and Power Co.	VA	04/13/20	9.20	Fully Litigated
Average			9.69	
Median			9.42	
All electric cases				
Average			9.55	
Median			9.45	
Data compiled Aug. 3, 2020. Reflects return authori: Source: Regulatory Research Associates, a group wi	zations in ithin S&P	n H1'20. 9 Global Marke	et Intelligence	

3

With that said, among utilities under the vertically-integrated model, the Kentucky
Commission has shown itself to be wisely conservative in terms of how it awards ROEs.

But even in a review of vertically-integrated states across the county, KU and LG&E's
 request fits into the highest end of awarded ROE's.

3 Q: Why is it important to focus on whether a state follows a vertically-integrated model 4 versus how some people would describe a "restructured" model of deregulation?

- 5 A: In restructured states, utilities should be allowed a greater return on equity if they believe 6 they can realize it. They are working within market forces that are not present in a 7 vertically-integrated state when the only competition is that which is synthesized by the 8 ratemaking process. In fact, the utility that received the highest ROE of any vertically-9 integrated state was 10.02% by the Iowa Utilities Board to Alliant Energy Corp. It should 10 be noted Iowa is much different than many vertically-integrated states in that there are 11 service territories that allow for third-party purchase power agreements.
- With that said, the Companies in this joint filing are asking for the highest end of the ROEspectrum among vertically-integrated states.

14 Q: You mentioned the ROE decision in the Duke Kentucky Energy, Inc. rate case earlier 15 in your testimony. What was the Commission's reasoning in ordering a 9.25% ROE?

A: The Commission, in their Order, pointed to the 9.25% as being a part of the range of analysis provided by the Company itself and was above the recommendation of the Kentucky Attorney General's office. The Commission further noted that the utility industry is "low risk" and that the utility had tools that would help with mitigating the effects of regulatory lag. It used those factors as a belief that the previous ROE awarded to Duke Kentucky Energy of 9.75% was not factoring in the realities of the marketplace and that a downward adjustment was necessary.

Q: This review doesn't include the most recent decision by the Commission involving the award of KPC's ROE at 9.3%. Does that change your opinion at all?

3	A:	No. In fact, I believe this only helps to validate the analysis conducted by the Commission
4		in the KPC case. In that order, the Commission said the following in its conclusion:
5		The Commission notes that, with the relative decline of industry and the
6		economy in eastern Kentucky generally, Kentucky Power has struggled to
7		achieve its allowed ROE. Furthermore, the Commission recognizes the
8		need for adequate cash flow so that Kentucky Power can effectively manage
9		its operations. Balancing the needs of Kentucky Power and its customers,
10		and reviewing the record in its entirety in this proceeding, the Commission
11		finds that an ROE of 9.3 percent is fair, just and reasonable.

12 Q: Shouldn't the Commission simply use the same analysis to award a 9.3% ROE in this 13 case as well?

A: It would be my belief that, given the hardships of COVID-19 and the subsequent downturns
involving job losses, evictions, and electricity shut-offs that any factors that would increase
economic burdens on the ratepayers of these Companies should be avoided. In the KPC
Order, the Commission notes the economic conditions of ratepayers must be a factor into
their decision. Thus, the Commission should apply an ROE from the lowest end of the
ranges suggested by the parties.

20 **Q:**

Does LG&E and KU offer a range of potential ROE based on its analysis?

A: Yes. Company witness McKenzie notes the "bare bones" analysis ranges from 9.4% to
10.6% based on the weight provided to "different extremes at the high and low ends of the

extreme." It should also be emphasized McKenzie goes further in pointing that the COVID 19 pandemic is not factored into this analysis because there's no way to know the long term effects of COVID-19 on the financial markets.

4

Q: Do you have concerns about the witnesses' exclusion of COVID-19 from its analysis?

5 Yes. This analysis leaves out any consideration of the impact on COVID-19 on the A: 6 ratepayers. Part of the problem with Companies' entire application is a focus on their 7 financial positioning without considering the financial status of their ratepayers. In fact, we 8 can look at the current situation for Kentucky – given the size of LG&E and KU's joint 9 footprint that it makes no real sense to isolate data from their service territory from the 10 entire state itself- to show that there are adverse consequences to the financial status of the 11 public. Joblessness is up, evictions are up and are going to get worse, and there is a tidal 12 wave of electric disconnections coming. Electricity affordability is even more critical due 13 to more children learning from home, as an example. The Commission can look at these 14 conditions right now and make a determination that increasing the ROE for the Companies 15 will be a detriment to customers.

16

Q:

What is your recommendation?

A: Given the economic challenges facing Kentucky at this point in time, issuing such a high
ROE would be a detriment to KU and LG&E's ratepayers. I believe the Commission should
look to award the Companies' an ROE towards the lower end of any analysis conducted
by Commission staff. This would be consistent with the most recent Commission ruling on
ROE and factors in the economic circumstances of their ratepayers in determining what a
"fair and reasonable" ROE constitutes during such an unprecedented period.

1		An ROE similar to what was ordered in that previously decided Duke Kentucky case, as
2		well as the recent KPC case, would be appropriate not only for the ratepayers but for the
3		Companies themselves.
4	v.	Rate Design
5	Q:	Please explain the change to residential customer charges proposed by the Company.
6	A:	The Companies proposes to increase the daily "Basic Service Charges" ⁴⁷ from \$0.53 to
7		\$0.61 for KU, and from \$0.45 to \$0.52 for LG&E. For KU, this is a monthly increase of
8		\$2.84 and \$2.21 for LG&E customers. I concluded this by taking the daily increases and
9		assuming 4.5 weeks a month.
10	Q.	On what basis do the Companies propose to increase residential customer charges?
11	A.	The Companies believe it is necessary to increase its basic service charge on the basis of
12		cost recovery. In his direct testimony, Witness Robert E. Conroy states that an increase to
13		the basic service charge will reflect the proportional cost of providing service to this
14		customer class but will not include "all of the costs associated with delivery" to ratepayers.
15	Q.	What is your concern, if any, with the proposal to increase this basic service charge?
16		First, I think it's important to look at this from a general perspective. Utilities across the
17		United States have sought increased fixed charges in recent rate cases, with mixed results.
18		Typically, a higher fixed charge can guarantee cost recovery to utilities facing reduced
19		loads due to energy efficiency measures, reduced consumption induced by distributed

These charges include "Rates RS", "Residential Time-of-Day Demand Service" (Rate RTOD-Demand), "Residential Time-of-Day Energy Service" (Rate RTOD-Energy), and Volunteer Fire Department Service (Rate VFD) as found on page 21 of Mr. Conroy's Direct Testimony

2

energy generation or customer defection, or due to economic challenges to the utility, including those introduced by volatile or changing weather patterns.⁴⁸

3 Please summarize the effect of the Companies' proposed changes to the basic service **Q**: 4 charge.

5 A: The proposed increase to the basic service charges would have a detrimental impact on 6 low-income customers, low-usage customers, customers employing distributed energy 7 resources on-site (e.g., net metered solar, etc.), and on the overall energy conservation and 8 energy efficiency goals supposedly important to the Companies themselves. An increase 9 to the basic service charge, as proposed in this tariff, introduces a negative feedback loop 10 into the cycle of energy generation, consumption, and subsequent demand. Namely, by 11 raising standard fees that do not vary with customer energy use and over which customers 12 themselves have no control, the proposed basic service charge increase will have the 13 adverse effect of disincentivizing energy conservation and energy efficiency investments 14 of residential customers. The proposed increases for both companies will strain rate-design 15 principles regarding bill predictability for customers reducing consumption and will 16 impose unavoidable costs onto customers.

17 Q. Have the Companies recently seen an increase in their basic demand charge?

18 Yes. In case number 2018-00294, the Commission approved a basic service charge for A. 19 residential customers of \$0.53 per day, or \$16.69 per average month. In case number 2018-20 00295, LG&E was allowed a daily charge of \$0.45 for basic services for customers, or \$14.15 per average month. This Order was signed on April 30th of 2019. By the time this

⁴⁸ Whited, M. et al. (2016). Caught in a fix. Synapse Energy Economics.

rate case will be heard, it will barely have been two years since the Companies received a
 significant increase in its basic service charge.

3 Q: What is your recommendation regarding the basic service charge?

4 A: It is our recommendation that it remain at the current rate.

5

Q. What approach was taken in making your recommendation?

A. I will present a conceptual analysis to demonstrate how the proposed charge increase will
negatively impact energy conservation and energy efficiency goals through what I term a
"negative feedback loop."

9 Q. How would an increase to basic services charges impact vulnerable populations?

10 Increased fixed charges impose a disproportionate burden on vulnerable customers, A. 11 including low-income customers, seniors' households or households with young children, 12 who may be struggling with volatile or burdensome electricity bills. Low-income 13 customers already suffer heavily from high costs of energy, and are more likely to forego 14 critical services (e.g., using air conditioning during heat events, heating homes to comfortable temperatures during the winter) in favor of keeping bills low.⁴⁹ These are costs 15 16 over which low-income or conservation-minded customers attempt to exert control; in 17 contrast, an increase to fixed charges is a cost over which there is absolutely nothing the 18 customer can do to manage their bill. An annual bill increase for basic service charges 19 alone to \$210.00 (from \$168.00) will have a much more sizable impact on a low-income 20 customer than it would to a customer earning a comfortable middle class wage.

21

Q. How would an increased basic service charge impact low-usage customers?

⁴⁹ Vote Solar, "Guidance for utility commissions on Time of Use rates: A shared perspective from consumer and clean energy advocates", Electricity Rate Design Review Paper No.2, July 15, 2017, *available at* <u>https://votesolar.org/files/9515/0039/8998/TOU-Paper-7.17.17.pdf</u>

1 A. Increased customer charges are not sensitive to the nuances and varied system 2 requirements among diverse customers. For example, apartments historically have the lowest cost of service of any customer class due to the fact that multiple units can be served 3 through a single delivery point.⁵⁰ Despite the lesser demand placed upon the system by 4 5 such customers, those who reside in apartments may be unfairly and disproportionately 6 assigned to customer-related cost recovery charges. Additionally, low-income customers 7 are more likely to reside in multi-family apartments, which cost less than individual 8 residences to serve, as well as tend to consume less energy than their higher-income 9 counterparts. An increase to the basic services charges will impose inequitable costs to 10 these customers, who can literally do nothing to respond.

Q. How would an increased basic services charge impact customers employing distributed generation, or those investing in energy efficiency upgrades?

Utilities have insisted that an increased fixed charge will assist the utility in recovering 13 A. 14 costs formerly associated with full-time customers, but when accounting for customers 15 who have become less reliant on the grid due to their installation of solar panels or other 16 distributed energy resources ("DER"), will account for the losses, defections, or sales 17 reductions to such customers. However, higher fixed charges essentially punish low-usage 18 customers, who are (1) actually contributing predictable, low-cost power to the grid, (2) 19 reducing their own demand during system peaks, or (3) covering the cost of equipment that 20 ultimately contributes to the grid, as customers utilizing DER cover the costs of installation 21 and operation of the equipment.

⁵⁰ Lazar, J. (2016) "Use great caution in design of residential demand charge rates". Regulatory Assistance Project, *available at* <u>https://www.raponline.org/wp-content/uploads/2016/05/lazar-demandcharges-ngejournal-2015-dec.pdf</u>

1 The Company does not pay its DER customers for anything in Ky., but credits power sent 2 back to the grid. As this power relationship mirrors the transactional relationship between the Company and the power market, it cannot be said that other customers absorb the cost 3 of another's net metered solar, for example. Recent studies have pointed to the fact that 4 5 DER customers provide one of the surest avenues by which a utility may lower its revenue 6 requirement through avoided investment in additional generation, transmission, and distribution equipment.⁵¹ To be clear, an increase to the fixed customer charge will 7 disincentive DER proliferation, and is shortsighted in its imposition on resource 8 9 diversification. Also, just to make clear, a net metered customer-generator does not make 10 a "sale" with excess generation. It is only available as a credit amount to reduce the current 11 billing cycle bill total or future bill amounts (with grandfathered N.M.S. service with 12 excess kWh available after netting for current billing cycle).

13 Q. How would an increased customer charge impact system-wide energy usage?

A. In a 2015 case before the Minnesota Utilities Commission, an increase to fixed customer
 charges was denied on the basis that "a customer-charge increase⁵² for [residential] classes
 would place too little emphasis on the need to set rates to encourage conservation."⁵³ The
 unintended consequence of such actions on energy conservation and consumption have
 been noted elsewhere, including by environmental advocates in a recent rate design case
 before the Missouri Commission.

⁵¹ Whited, M. et al. (2016). "Caught in a fix." Synapse Energy Economics. See Figure 10, p.28.

⁵² Many jurisdictions use the phrase "customer charge" versus "basic services charge" but it is our understanding they are synonyms.

⁵³ Minnesota Public Utilities Commission, In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in the State of Minnesota; Findings of Fact, Conclusions, and Order; Docket No. E-002/GR- 13-868, May 8, 2015, p. 88.

1 Furthermore, while the Company seeks an increase to its customer charge, utility 2 regulatory bodies from across the country have made a few notable decisions to *decrease* 3 high customer charges. Regulators, environmental groups, and consumer advocates cited 4 the impacts on energy conservation and efficiency, to DER customers, and to low-income 5 customers as driving forces behind the decision to reduce fixed customer charges (see footnotes; 2018 Connecticut Public Utilities Regulatory Commission rate case⁵⁴; 2017 6 New York Public Service Commission rate case⁵⁵). In the 2017 case before the New York 7 Public Service Commission, the Acadia Center listed four primary reasons behind their 8 9 support for a reduced customer charge, three of them environmental. High customer 10 charges: (1) disincentivize energy conservation, efficiency measures, and DER 11 proliferation because they devalue a kWh saved or generated; (2) reduce diversity of the 12 overall resource portfolio on a particular grid for the same reason; and (3) inhibit GHG emissions reductions targets by disincentivizing investment in the technologies and 13 resources that contribute to a "cleaner" grid (e.g., energy efficiency measures & DER).⁵⁶ 14

15 VI. <u>Rate Increase Drivers, Demand-Side Management, "Efficiency", and On-Bill Finance</u> 16 <u>Tariffs</u>

17 Q: Can you briefly summarize the testimony regarding the Company's purported need

18 for this rate increase?

⁵⁴ Connecticut Public Utilities Regulatory Commission. Docket No. 17-10-46, Decision In the Matter of the Connecticut Light and Power Company d/b/a Eversource Energy (April 18, 2018).

⁵⁵ State of New York Public Service Commission. Case No. 17-E-0459, Order Adopting Terms of Joint Proposal and Establishing Electric and Gas Rate Plan In the Matter of Central Hudson Gas & Electric Corporation (June 14, 2018).

⁵⁶ Statement in Support of Joint Proposal by Howe, C., on behalf of Acadia Center. New York Public Service Commission. Case No. 17-E-0459, In the Matter of the Central Hudson Gas & Electric Corporation (May 2, 2018).

1 A: Yes. On Page 20 of his Direct Testimony, Company witness Paul Thompson attributes 2 flattening sales with the ever-increasing need to invest in capital projects as the reason this 3 rate increase is being sought. As a further justification for this 10-11% increase in rates, 4 witness Thompson discusses how the Companies' efforts to incorporate "efficiency" has 5 not led to the necessary cost controls required to avoid such demands for more revenue. 6 "(A) focus on efficiency, along with our focus on safety, reliability, and customer service 7 and satisfaction, are core principles of our business culture that we continue to reinforce with our employees and contractors⁵⁷." 8

9

Q: What does Company witness Thompson mean by efficiency?

10 Coupled with testimony from other Company witnesses, it is clear he is talking about A: 11 expenses in regards to the operations and management of the Companies. Using technology 12 to minimize redundancy and the need for human labor, things of that nature. Typically, I think of "efficiency" in terms of a resource; incorporating demand-side management 13 14 ("DSM") technology to reduce customer usage and therefore the reduce the amount of 15 power that must be generated by the utility. When discussing utility ratemaking, I think it's 16 important to use terms as they are commonly employed in the profession to avoid 17 confusion.

18 Q: In terms of DSM and other efficiency measures, are there any new programs 19 referenced in this testimony?

A: No, there are not and I think that's a significant problem for the Companies. In response to
a data request, the companies provided a spreadsheet summarizing their programs and
budgets over the past 5 years⁵⁸:

⁵⁷ See also Page 20 of Company witness Thompson's Direct Testimony

⁵⁸ 2020_MA-KFTC-KSES_DR1_KU_Attach_to_Q59.

Participation Units
2020 \$ 834 Annual Rebate (\$000s)
4,000 Annual Customers
185,688 Cumulative Appliances Controlled
207 Cumulative Sites 20,000 Cumulative Customers
NA
NA Cumulative Customers NA Annual Appliances Recycled
NA Annual Rebate Counts
NA Amual customers
severely
separate
perations
they are
how the
IRP") in
cifically,
is, The
but their
ige 10 of
e v e al h

⁵⁹ Page 3 of the "2018 IRP Resource Screening Analysis"

1 2 3		characteristics for this program were taken from the Companies' recently approved 2017 DSM filing.
4		A footnote on this paragraph states that the Companies "do not plan to purchase or
5		capitalize new devices for this program."
6	Q:	Immediately prior to the filing of the Companies' IRP the Commission had approved
7		of energy efficiency measures for the Companies?
8	A;	That's right. On October 5 th of 2018, in Case No. 2017-00441, the Commission authorized
9		a DSM surcharge of \$1.64 that included the following:
10 11 12 13 14	•	A weatherization program that helps low-income customers improve the energy efficiency of their homes. The PSC approved a proposal by KU/LG&E intended to increase participation in the program by modifying the eligibility so that it is based on income, rather than energy consumption.
15 16 17 18 19 20		• A demand-reduction program that pays a rebate to residential and small commercial customers who agree to have a device placed on air conditioning systems, heat pumps and other appliances that allow the utilities to turn off the appliances for a brief period during times of peak electric demand. The program will be modified to reduce the rebate and to cap participation at the current number of customers.
21 22 23		• A demand-reduction program for large non-residential customers. It will be modified to cap participation and reduce rebates.
24 25 26 27		• A rebate program that incentivizes large non-residential customers to install equipment that reduces energy usage. It will be modified to base incentive payments on actual savings, rather than providing a fixed dollar amount.
28	Q:	Aren't these programs listed sufficient?
29	A:	These are minimal efforts to reduce load and help reduce demand from customers. I would
30		argue the absence of any testimony in the Companies' rate case suggest these programs
31		have next to no impact on their operations and, as a result, on their costs. I would say the
32		Companies need to do a lot more in the field of energy efficiency and DSM.
33	Q:	Why aren't the Companies pursuing any more robust programs?

- 1 A: This was a question the Coalition posed in its Data Request #30 when the following was
- 2 posed:

4 5

6

7

8

9

10

11 12 13

14 15

16

17 18

19 20

21

22

23

24

(Company Witness) Saunders, at p. 3, lines 8-17 (p. 408 of pdf 10--LGE_Testimony 1 of 4), discusses "improving the quality of life" of customers served and "refusing to compromise on safety and health,". Have the companies considered offering any energy efficiency programs that also simultaneously address the health of your customers? Programs like the Green and Healthy Homes Initiative have already proven to lower asthma rates, lower energy bills, and provide on overall better quality of life for residents. Is this something KU and LG&E would consider offering? If not, why not?

The Companies responded as follows:

"(We) are open to considering new (DSM-EE) programs, including those that benefit human health. But to be approved by the Commission, such programs must pass at least one of the Commission's four longstanding cost-benefit tests:

"Any new DSMEE program or change to an existing DSM-EE program shall be supported by ... [t]he results of the four traditional DSM-EE costbenefit tests [Participant, Total Resource Cost, Ratepayer Impact, and Utility Cost tests]."

25 Those tests do not take into account health benefits or other societal benefits; indeed, the Commission stated in its final order in the Companies' 26 27 most recent DSM-EE program plan case: In evaluating the costeffectiveness of the proposed DSM/EE programs, the Commission 28 29 disagrees with MHC's recommendation to include the cost of non-energy 30 factors and benefits. KRS Chapter 278 creates the Commission as a 31 statutory administrative agency empowered with "exclusive jurisdiction 32 over the regulation of rates and service of utilities." The Commission has 33 no jurisdiction over environmental impacts, health, or other non-energy 34 factors that do not affect rates or service. Lacking jurisdiction over these non-energy factors, the Commission has no authority to require a utility to 35 include such factors in benefit-cost analyses of DSM programs.2 Therefore, 36 37 although the Companies are willing to consider DSM-EE programs that also benefit human health, for any such program to be approved it must 38 39 demonstrate merit under the Commission's established cost-benefit tests 40 irrespective of its health benefits.

- 42 Q: Couldn't the Companies propose a DSM or EE proposal that met the Commission's
- 43

41

criteria while also providing non-economic benefits as well?

21	Q:	Do you believe the Companies need to strengthen their demand-side efforts?
20		cycles of poverty.
19		respectively. Households with high energy burdens are more likely to stay caught in
18		stay-at-home orders and to students and adults learning and working from home,
17		losses; reduced income; and higher energy bills resulting from more time at home due to
16		majority communities-may have difficulty paying their energy bills due to massive job
15		In the wake of the coronavirus pandemic, more households—especially in minority-
14		therefore forcing them to live in uncomfortable and unsafe houses. ⁶⁰
13		Households experiencing energy insecurity may forgo necessary energy to reduce bills,
12		or heat stress resulting from leaky and/or unrepaired heating and cooling equipment.
11		pulmonary disease (COPD); it is also associated with the potential for hypothermia and/
10		thermal discomfort, and respiratory problems such as asthma and chronic obstructive
9		associated with other health impacts, such as carbon monoxide poisoning, lead exposure,
8		also live in older, inefficient, and unhealthy housing. Inefficient, substandard housing is
7		development. Researchers have found that many households with high energy burdens
6		been found to affect physical and mental health, nutrition, and local economic
5		energy efficiency measures are associated with inadequate housing conditions and have
4		is also more beneficial in terms of health and indoor air pollution levels. Inadequate
3		terms of reducing costs and reducing stress on the grid, but having a more efficient home
2		customers as well as meeting the requirements of the law. I don't mean this simply in
1	A:	Yes. In fact, it is my opinion energy efficiency measures are inherently beneficial to

 $^{^{60}\} https://www.aceee.org/sites/default/files/pdfs/u2006.pdf$

A: Yes. Regulators and utilities must be creative, to deliver results for customers. But, by
 looking at other approaches, there are ways to benefit the utility as well as its customers
 while encouraging investment into demand-side mechanisms.

Further, I believe that the extreme weather witnessed in the middle and southern part of the country last month suggests that energy efficiency could help minimize stress and strain to the grid. Very few people are discussing how limiting demand will have an impact on the amount of energy that must be produced and transported. I believe, more than ever, that energy efficiency needs to be discussed and new solutions need to be proposed to deal with a problem that is going to become more and more frequent.

10

Q: Do you have a proposal in mind?

A: Yes. I would propose an on-bill financing tariff more commonly known as Pay As You
Save [®], or PAYS.

13 Q: What is PAYS®?

14 A: This is a market-based system that enables utility customers to purchase and install cost-15 effective energy efficiency upgrades through a voluntary program that assures immediate 16 net savings to customers. The idea behind PAYS[®] is for energy-saving upgrades to be 17 installed in a customer's home or building, but the utility pays the up-front cost of the 18 installed energy saving measures. To recover its costs, the utility puts a fixed charge on the 19 customer's electric bill that is significantly less than the estimated energy savings from the 20 upgrades. Therefore, the customer sees immediate savings by incurring less expense for 21 energy while paying a fixed charge that is below the total estimated energy savings. Once 22 the utility recovers its costs, the obligation of the customer to pay ends.

1 I always find illustrative depictions to be helpful. I've included one below in Graphic JO-

2 **6 – How PAYS** ® Works:



3

4 Q: How did you become familiar with PAYS®?

5 A: I originally became familiar with PAYS® from a presentation provided on the program to 6 the Missouri Public Service Commission while I was Public Counsel in 2016. I found the 7 program could be beneficial to customers as well as to efforts regarding energy efficiency 8 and the reduction of energy generation. The Office of Public Counsel conducted its own 9 research to make sure our understanding of the program was adequate. When I became 10 Executive Director of Renew Missouri, I learned this organization was gearing up its 11 advocacy for the program. Within this organization, I have continued to explore the 12 nuances of this program by meeting with PAYS® program operators across the country to 13 learn about their professional experience with the program.

14 Q: What are the eligibility requirements for a PAYS® program?

A: The program can be made available to all interested customers who take service under any
 rate schedule for energy efficiency improvements on a voluntary basis. The program is

available to any customer who voluntarily wishes to participate and shall not be a
 requirement that the structure be all-electric.

3 Q: Is the PAYS® program only available to property owners?

A: No. The program is available to all customers, but if the customer is not the building owner,
the building owner must sign a contract, agreeing to not remove or damage the upgrades,
to maintain them, and to provide notice of the benefits and obligations associated with the
upgrades at the location to any customer before their rental of the property.

8 Q: What are the participation requirements for an interested customer?

9 A: To participate in the program a customer must request an analysis of cost-effective energy 10 efficiency upgrades, agree to the terms of the cost effectiveness analysis fee, and review 11 the Energy Efficiency Upgrade Agreement that defines customers' benefits and 12 obligations.

13 Q: Who will be doing the energy efficiency upgrade and audit work for customers?

14 A: An approved energy efficiency contractor including trade allies or a future approved 15 program operator can complete the work for both the energy audit and the energy efficiency 16 upgrades. The contractor will perform a cost-effectiveness analysis and prepare an Energy 17 Efficiency Plan identifying recommended upgrades to make energy savings improvements. 18 The utility may operate the program directly with its own staff resources or hire an 19 experienced program operator to implement the program. When a customer wants to 20 proceed with implementing the Energy Efficiency Plan, the utility staff or program operator 21 determines the appropriate monthly Service Charge.

22 Q: What energy savings can be expected for the customer?

A: The participating customer can expect to see the estimated energy savings due to the quality assurance requirement of the program. If the work has not been adequately completed, the contractor will not be compensated for their work until the issues have been rectified. The contractor is paid by the utility after the energy efficiency upgrades have been completed and following on-site or telephone inspection and approval of the installation by the utility or its program operator.

7

0:

How will the PAYS® Services Charge be assessed for participating customers?

8 A: The utility will recover the costs for its investments including any fees as allowed in the 9 PAYS® tariff through monthly Service Charges assigned to the location where upgrades 10 are installed. Customers occupying that location will continue the payments until all utility 11 costs have been recovered. The Service Charges will be set for a duration not to the exceed 12 80% of estimated life of the upgrades or the length of a full parts and labor warranty, 13 whichever is greater and in no case longer than twelve years. The Service Charges and 14 duration of payments will be established and included in the Efficiency Upgrade 15 Agreement.

When will a participating customer receive their first PAYS® Services Charge after

16

17

Q:

completion of the work?

A: The customer shall be billed the monthly Service Charge as determined by the utility no sooner than 45 days after approval by the utility or its program operator. The utility will bill and collect Service Charges until cost recovery is complete except in case of a needed repair at no fault of the program participant. Prepayment of unbilled charges will not be permitted to facilitate installed upgrades remaining and continuing to function at the location for at least the duration of utility cost recovery.

Q: Which energy efficiency upgrades are eligible under this program?

2 A: All upgrades must have Energy Star certification or must be a Commission approved energy efficiency measure. Based on the types of projects that have been completed in 3 4 Kentucky through the How\$martKY program with Rural Electric Cooperatives across the 5 state, at a minimum an on-bill tariff program should have the following EE measures 6 available. These measures should include, but not be limited to, attic insulation, floor 7 insulation, reduce duct/air leakage, HVAC, LED lighting, water heating, and heat pumps. 8 The utility may seek to negotiate with contractors or upgrade suppliers extended warranties 9 to minimize the risk of upgrade failure on behalf of all participating customers and prices 10 (e.g., per square foot in the case of insulation) to assure the lowest possible cost for all 11 projects.

12 Q: Is there a savings requirement for customers that participate in a PAYS® program?

13 A: Yes. To ensure that participants benefit from the program, the recommended upgrades shall 14 be limited to those where the annual Program Service Charges, including program fees and 15 the company's cost of capital are no greater than 80% of the estimated annual benefit from 16 reduction to the participating customers' annual utility charges based on current rates in 17 electricity costs. This requirement reasonably assures customers participating in the 18 program that they will receive a minimum reduction of 20% in their annual utility charges. 19 To get a better sense of how this could look for customers in Kentucky, the How\$martKY 20 program has an average monthly projected savings of \$51.98 and an average monthly 21 charge is \$39.98.

Q: How will a PAYS® program interact with currently available energy efficiency rebate programs?

1 A: Offering customers the option to participate in a PAYS® program will complement the 2 currently available Targeted Energy Efficiency Program and would enable more robust and 3 diverse customer participation. The Targeted EE program for residential customers provides weatherization and energy efficiency services, if customers meet the income-4 5 eligible guidelines that are designated by poverty guidelines administered through the 6 Kentucky Community Action network through local community action agencies. The 7 PAYS[®] program has very similar measures available, but instead of being paid for through 8 LIHEAP or utility dollars, the upgrades are paid for by the participating customer. These 9 programs could even be coupled for low-income qualifying customers and would allow for 10 these customers to finance additional upgrades by allowing them a co-pay option for any 11 upgrades that would not be cost-effective under the Targeted EE Program. The PAYS® 12 program would work well with this existing program and would provide energy efficiency 13 savings opportunities to all residential customers, regardless of their income. Additionally, 14 the Commission could establish a multi-stakeholder process to support program design of 15 any financing offering for low-income renters that are eligible for both the Targeted EE 16 Program and the PAYS® program.

17

Q: Will PAYS® offer a co-pay option?

A: Yes. The co-pay is used to pay for measures that do not pass as cost-effective after the
 analysis or audit has been completed. This would be a key condition to include in any
 PAYS® or similar on-bill tariff financing program to allow customers the ability to finance
 additional efficiency measures that are not cost-effective or have lower savings potential.

22 Q: How will the utility be made whole in the event of an uncollectable service charge?

23 A: Since the PAYS® program is tied to the metered location, the person responsible for paying

1 the bill at that location will be subject to the Service Charge until it is fully recovered. In 2 the event that the participant moves from the location, the next property owner or occupant will resume payment of the PAYS® Service Charge on his or her utility bill. Under this 3 4 model, there is little room for an uncollectable account, but one could still arise if there is 5 a natural disaster or the location is abandoned. In the event there is such a disaster, the 6 utility can establish a loss reserve fund and I am aware of experienced program operators 7 that have established this type of a fund for the utility. The only other example of 8 uncollectable would be in the case that an upgrade fails and cannot be repaired or replaced 9 cost-effectively through no fault of the customer, which would require the utility to waive 10 all remaining charges. You can read more details on how repairs are handled under PAYS® 11 in Section 8 of the PAYS Exemplar Tariff attached as Schedule JO-2. Additionally, we do 12 not foresee an event of an uncollectable service charge outside of abandonment or a natural 13 disaster, due to the success of the How\$martKY program in the state. There has not been 14 an issue in Kentucky for the How\$martKY program which has been operating in the state 15 since 2011 through six rural electric cooperatives offered through the Mountain Association as the program operator⁶¹. As of last June, the program had assessed 607 16 17 buildings, offered upgrades to 405 member-owners, and facilitated 320 energy efficiency 18 retrofits. There have been zero disconnections for non-payment in Kentucky.

19

Q: How will maintenance of PAYS® energy efficiency upgrades be accounted for?

20

A:

21

Participating customers and building owners (if the customer is not the building owner)

must agree, when signing the Efficiency Upgrade Agreement or the Owner Agreement, to

⁶¹ It is imperative to note I am not suggesting Mountain Association, one of the organizations for which I am providing testimony, serve as the administrator of this program. Utilities should consider managing the program internally or contracting with third-party administrators as part of a robust bidding process.

keep the upgrades in place for the duration of Service Charges, to maintain the upgrades per manufacturers' instructions, and report the failure of any upgrades to the Program Operator or utility as soon as possible. If the upgrade fails, the utility is responsible for determining its cause and for repairing the equipment in a timely manner as long as the owner, customer, or occupants did not damage the upgrades, in which case they will reimburse the utility.

7 8

O:

How will energy audits be paid for as part of the PAYS® program requirement for a cost-effectiveness analysis?

9 A: The cost of the energy audit will be included in the PAYS® tariff fee on the participating 10 customer's utility bill. This cost can vary depending on the building type. Homeowners can expect an energy audit cost of \$300-\$800 according to RESNET.⁶² Additionally, the energy 11 audit is valued at \$300 by Ouachita Electric's HELP PAYS® program.⁶³ The cost for an 12 energy audit or energy assessment in a multifamily housing property has a larger range of 13 14 \$1,000-\$4,000. This range is dependent on the American Society of Heating, Refrigerating 15 and Air-Conditioning Engineers ("ASHRAE") level of the completed assessment. While 16 the level of detail in the energy assessment contributes to the cost, the other important 17 factor is the size of the property including the number of units. The cost of this audit would 18 also be included in the PAYS[®] Service Charges paid by the participating customer. If the 19 customer chooses not to sign an Efficiency Upgrade Agreement to roll the energy audit 20 cost into the Service Charges, charges for the cost of the audit will appear on the next 21 monthly bill.

⁶² https://www.resnet.us/home-energy-audits-faqs

⁶³ https://www.oecc.com/help

Q: When the utility's investment is fully paid off, how will the Service Charge be terminated?

A: Once the utility's costs for upgrades at a location have been recovered including: its cost
of capital, the cost paid to the contractor to perform the work, and costs for any repairs
made to the upgrades, the monthly Service Charge will no longer be billed. Additionally,
after completion of payment of the Service Charges the ownership of the installed upgrades
will be transferred to the property owner.

8 Q: Has PAYS® been implemented in other states?

9 A: Utility regulators in Arkansas, Kansas, Missouri, and more have already approved opt-in 10 tariffs for building efficiency upgrades. Although only a few leading utilities in each of 11 those states are taking advantage of the opportunity thus far, all of them are using the same 12 system for their program design, called Pay As You Save[®]. PAYS[®] offers all customers the option to access cost-effective energy upgrades using a proven investment and cost 13 14 recovery model that benefits a participating utility. Opt-in on-bill financing tariff programs 15 have also been ordered at public service commissions in California (specific to water 16 measures), Hawaii, and Michigan.

17 Q: Can PAYS® be considered a "demand-side program"?

A: Yes. Kentucky law describes "demand side management as "any conservation, load
 management, or other utility activity intended to influence the level or pattern of
 customer usage or demand, including home energy assistance programs."⁶⁴ PAYS ®
 would fit under that definition. Why PAYS® is important is due to the fact that it can
 specifically target residential customers and renters who cannot afford those energy

⁶⁴ KRS 278.010(17)

efficiency programs or do not qualify for demand-side programs usually reserved for low-income residents or large-scale customers. PAYS®, as considered as a part of these other programs already being offered by the Company, allows for a demand-side portfolio that indeed provides benefits for all customers of all classes. Adding a PAYS ® program is a way for the Companies to encourage energy efficiency that is beneficial for customers as well as meeting the criteria required by the Commission

7

Q: Have the Companies indicated they are in favor of PAYS®?

8 A: Sort of. At least, KU has addressed this topic specifically. In Response to the Coalition's 9 Data Request #31, KU indicates it had discussed with Mountain Association (one of the 10 members of the Collation I am testifying on behalf of) about offering a "PAYS-type 11 program" but said the "operational, legal, and regulatory issues around implementing such 12 an offering were highly complex especially as it relates to mitigating the risk of default and 13 whether the risk of default stays with a customer or the property where the retrofits were made." KU also believe that, "if a customer defaults on the financing, disconnection 14 15 decisions add to the complexity."

_

16 Q: What is your response to KU's concerns?

A: This suggests to me that KU doesn't understand the concept of PAYS®. First of all,
offering any new program offers complications and challenges. While it is easier just to
seek a 10-11% rate increase on your customers, working on programs that would benefit
your customers with lower costs and greater efficiencies are also worthwhile and carry
greater benefits.

Moreover, to use the term "default" – as KU does - suggests the utility believes PAYS®
is a loan program. It is not. This is a capital investment by the utility. The investment stays

1 with the meter. That's an essential element of PAYS® and really doesn't add any 2 "complexity" to the decision. If a customer does not pay their bill, this will be treated like 3 any other customer who does not pay their bill. It will be handled in exactly the same way. In Missouri, the two largest electric utilities - Ameren Missouri and Evergy - are 4 5 introducing PAYS® programs this year. Our state's third electric utility – Liberty – will be 6 proposing a PAYS® program to regulators shortly. Spire Gas, our state's largest gas utility, 7 has even filed paperwork to create a gas PAYS[®] program that is currently pending before 8 the PSC. These utilities have figured out how to make it work despite these "regulatory 9 and legal complexities." KU and LG&E could simply look at how other utilities have 10 developed and executed their PAYS program and replicate that process.

11

Q: What is your recommendation to the Commission?

A: The Commission should require the Companies, through an order. to develop a tariff to
facilitate a PAYS® program or similar tariff on-bill financing program for their customers.
This program should be available specifically for customers without access to credit,
renters, rental property owners, and small businesses. It is my assertion that PAYS®, if
developed properly with proper marketing efforts, will greatly enhance participation in
energy efficiency efforts, and provide greater earnings opportunities.

18 VII. <u>AMI meters</u>

19 Q: What is Advanced Metering Infrastructure ("AMI")?

A: AMI is an integrated system of smart meters, communication networks, and data management systems that enables two-way communication between utilities and customers. The system provides a number of functions that were not previously possible or that had to be performed manually, functions such as the ability to automatically and

remotely measure electricity use, connect and disconnect service, detect tampering, identify and isolate outages, and monitor voltage. Combined with smart appliances, such as programmable thermostats or water heaters, AMI also enables utilities to offer new timebased rate programs that encourage customers to reduce peak demand and manage energy consumption. In theory, AMI should reduce costs for metering and billing, and lower utility capital expenditures and outage costs.

7

Q: What do the companies propose in this case related to AMI meters?

A: The Companies propose to transition all (with the exception of opt-outs) of its electric
customers to AMI meters beginning in 2021 continuing until the meters are fully deployed
in March 2026. In contrast to the recent KPC's application, Case No. 2020-00174, the
Companies in this case do not propose an additional cost-recovery "rider" as part of their
application.

13 Q: Is the Companies' proposal to begin deploying AMI meters reasonable?

14 A: In part. Just a few months ago, I testified in KPC's case that AMI meters are becoming the 15 industry standard for electric utilities and have the potential to offer customers benefits 16 including improving system reliability, decreasing O&M costs, increasing usage 17 information, facilitating energy efficiency programs, and supporting distributed energy 18 resources. These benefits are laudable goals but they will not be achieved without detailed 19 plans and appropriate programs offered by the utility. I recommended a number of possible 20 conditions the Commission could attach to improve the proposal - including 21 recommending rejecting the cost-recovery rider. However, the Commission ultimately 22 issued its Order in that case *rejecting* both the AMI plan and the proposed cost-recovery mechanism. Here, I identify some of my concerns and recommend many of the same conditions if the Commission decides to permit the companies to move forward with AMI.

3 Q: Does the testimony in the Companies' cases on the company's AMI proposal differ 4 substantively from the recently rejected KPC proposal?

A: The proposal outlined by Company witnesses Seelye, Blake, Bellar, Saunders, Conroy, and
Wolfe does differ on the cost recovery mechanism, fees, information provided, and kinds
of programs. I suspect this is because this proposal is not KU or LG&E's first bite at the
apple. The Commission rejected the companies' previous proposal a few years ago in Case
No No. 2018-00005.

10 Q: What aspects of the AMI program does Witness Seelye describe in his testimony?

11 A: Although he offers testimony on a variety of other issues, as it relates to AMI meters, I 12 want the Commission to note his recommendations for AMI opt-out charges and the fees charged for disconnecting and reconnecting customers. With respect to the AMI opt-out 13 14 fees, the Companies are proposing an up-front opt-out setup charge per meter (\$39.00 for 15 KU, \$35.00 for LG&E-E, and \$33.00 for LG&E-G) and a recurring monthly opt- out 16 charge per meter (\$15.00 for KU, \$12.00 for LG&E-E, and \$5.00 for LG&E-G) applicable 17 to customers who choose to opt out of the proposed Advanced Metering Infrastructure (AMI) deployment.⁶⁵ For the disconnection / reconnection charges, LG&E is proposing to 18 19 increase its electric and gas disconnect/reconnect service charges from \$28.00 to \$32.00, 20 and KU is proposing to increase its disconnect/reconnect service charge from \$28.00 to \$37.00.66 21

22 Q: How do you respond to the proposed opt-out charges?

1

⁶⁵ Seelye Direct, p. 95.

⁶⁶ Id. at 94-95.

1 A: First, I want to note that achieving the potential benefits of AMI meters is, in part, 2 dependent on a broad adoption of the technology across the utility's customers. This applies for both potential program offerings – like TOU rates – and for O&M savings, like 3 reduced meter-reading costs. The rationale for requiring opt-out charges is that those 4 5 customers choosing a different meter should bear the costs of continuing legacy meter 6 operations (if they are given such a choice at all. Kansas has offered guidance that utilities 7 there do not need to offer opt-out tariffs). In Missouri, Evergy Missouri–Metro charges 8 customers choosing not to use an AMI meter an initial \$150 non-refundable fee plus a \$45 monthly recurring fee.⁶⁷ Based on my experience, and the information presented by the 9 10 companies here, the proposed opt-out fees are not unreasonable.

11 Q: Should the Commission adopt the disconnect / reconnect service charges?

A: No. Imposing increases to disconnect and reconnect fees at a time when many customers
who would otherwise never be subject to these fees will. only add to their current hardship.
As a matter of public policy and basic consumer protection, I recommend the Commission
reject these increases.

Furthermore, as it relates to customers who have AMI technology installed at their premises, these charges should be eliminated. Mr. Conroy testifies that the AMI meters would provide the ability to remotely disconnect and reconnect electric service.⁶⁸ As these new meters are installed the benefits may take years to materialize. Eliminating disconnection and reconnection fees once a premise has an AMI meter installed is a way for the Companies and Commission to bring benefits as soon as possible. The Company's

⁶⁷ https://efis.psc.mo.gov/mpsc/CommonComponents/viewdocument.asp?DocID=936254570&Version=4

⁶⁸ Conroy Direct, p. 45.

2

commitment to eliminating these fees for customers once an AMI meter is installed is a positive step.⁶⁹

- 3 Q: What aspects of the AMI program does Witness Blake describe in his testimony?
- 4 Mr. Blake's testimony describes the Companies' proposed cost recovery method for its A: 5 AMI investment. In his testimony, Witness Blake explains that the companies have 6 removed all revenue requirement impacts associated with AMI from the test period in these cases -i.e. they are not seeking rate recovery in this case.⁷⁰ Instead, the companies propose 7 to record their investment in the AMI project as Construction Work In Progress ("CWIP") 8 9 and accrue an allowance for funds used during construction ("AFUDC") during the projected implementation period of approximately five years.⁷¹ They also propose a variety 10 11 of regulatory assets and liabilities, including:
- 12 ... a regulatory asset during this implementation period comprised of three components: (1) operating expenses associated with the project 13 14 implementation ; (2) the remaining net book value of electric meters 15 replaced and retired as part of this project; and (3) the difference between AFUDC accrued at the Companies weighted average cost of capital per 16 17 Filing Requirement: Tab 63 – Sec 16(8) (j) Schedule J-1.1 and that 18 calculated using a strict interpretation of the methodology approved by the Federal Energy Regulatory Commission ("FERC").⁷² 19
- 20

21 Q: Is this proposed cost recovery approach reasonable?

22 A: Waiting until the system is installed and operational before placing it into customer's rates

- 23 during a full review in a later rate case is an improvement over a contemporaneous rider.
- 24 In my experience, the rate case process gives regulators, intervenors, and customer
- 25 advocates the best opportunity to review the prudence and relevant factors of what

⁶⁹ See proposed Tariff Sheet No. 45.

⁷⁰ Blake Direct, p. 9.

⁷¹ Id. at 10.

⁷² Id.

1 customers should pay for in rates. For that part, the approach is reasonable. However, the 2 breadth of the requested regulatory assets by the companies is less reasonable. For example, permitting recovery of meters retired before the end of their useful lives makes the utility 3 totally insulated from the purported risk for which it receives an ROE. A new technology, 4 5 AMI meters, may disrupt the status quo, but that does not mean that customers should 6 continue bearing the cost for a product that is no longer used or useful in providing electric 7 service. I also take issue with the companies' attempt to record the difference between 8 AFUDC accrued at the Companies weighted average cost of capital and that calculated 9 using a strict interpretation of the methodology approved by FERC. This "adder" for the 10 companies increases the cost of the proposal, offers no benefit to customers, and because 11 the utilities want (or have asserted a need) to move to AMI meters – the additional financial 12 incentive to do so would be a gratuitous hand-out to the companies paid by captive 13 ratepayers. This request should be rejected even if the commission otherwise approves 14 AMI investment.

15 Q: What aspects of the AMI program does Witness Bellar describe in his testimony?

A: Mr. Bellar describes how the companies have attempted to address the Commission's reasons for rejecting the previous attempt to begin deploying AMI meters. He sponsors Exhibit LEB-3, that shows the company's position that the longer we wait to deploy AMI, the more the opportunity to save money dissipates.⁷³ He lists eight reasons this application is different than the prior rejected case.

21 Q: Do you take issue with any of Mr. Bellar's conclusions?

⁷³ Bellar Direct, p. 61.

1 A: The Commission should continue to be concerned about the lack of rate design programs 2 to offer benefits to customers. Mr. Bellar, like other company witnesses, points to the possibility of "pre-pay" pricing as a way to allow customers to take advantage of the data 3 provided by AMI meters and network.⁷⁴ Consumer advocates have argued in many states 4 5 - successfully in Missouri – that pre-pay rates can be detrimental to customers even if they 6 create some level of conservation that occurs. The commission should require the 7 companies to develop programs and rates that will benefit customers, rather than simply allowing programs that reduce the risk company shareholders may face. 8

9 **Q**: What aspects of the AMI program does Witness Saunders describe in her testimony?

10 She discusses the program in terms of providing customers more information in order to A: actively manage their energy use in order to save money.⁷⁵ Unfortunately, the only program 11 12 the company is "committed to offering" is a pre-pay program upon full AMI deployment.⁷⁶ This would be an unfortunate way to utilize a 300 million dollar investment. If the 13 14 Commission wants customers to experience the potential benefits of AMI technology -a15 pre-pay rate falls short.

16 What does Witness Conroy say about new programs and rate offerings for AMI **Q**: customers?

17

18 A: After highlighting the pre-pay option as a goal of the companies, Mr. Conroy explains that:

19 ...the Companies commit to expand the availability of time-of-day rates 20 after full AMI deployment. The Companies already have residential timeof-day rates (RTOD-Energy and RTOD-Demand) and are proposing in 21 22 these proceedings two new General Time-of-Day rate schedules (GTOD-23 Energy and GTOD-Demand), all of which are optional rates with limited

⁷⁴ Bellar Direct, p. 62.

⁷⁵ Saunders Direct, p. 25.

⁷⁶ Id. at 29-30.

1 2 3 4 5		availability. The Companies will use their experience with these rate schedules and their Advanced Metering Systems Customer Service Offering ("AMS Offering"), as well as data from other utilities' AMI-driven tariff offerings, to create new rate schedules that will help customers maximize the benefits of AMI.
6		The stated commitment to exploring and offering additional rate schedules to help
7		customers realize benefits from AMI meters is encouraging, and the Commission should
8		order this as a condition of moving forward with the proposal.
9	Q:	What aspects of the AMI program does Witness Wolfe describe in his testimony?
10	A:	Mr. Wolfe describes the reliability and distribution benefits that AMI meters and network
11		can create. One improvement he focuses on is the opportunity to implement Conservation
12		Voltage Reduction ("CVR"). ⁷⁷ He explains that AMI meters will enable the companies to
13		manage the voltage delivered at the low end of the safe range while still providing safe and
14		reliable service. ⁷⁸ He also sponsors a report on the reliability advantages of AMI meters
15		produced by EPRI.
16	Q:	Are the reliability benefits described by Mr. Wolfe enough to justify installing AMI
17		meters system-wide?
18	A:	Standing alone, no. The Companies' testimony describes throughout how they are already
19		providing safe and reliable service. While it may be enhanced slightly by the new
20		technology, reliability is just one component that can help justify the cost of the project. In
21		order for customers to see benefit, there must be a combination of appropriate accounting,
22		programs, and improved reliability.

 ⁷⁷ Wolfe Direct, p. 21.
 ⁷⁸ Id.

Q: If the Commission approves AMI deployment, how would you recommend the
 Commission ensure that customers will experience benefits?

A: The Commission should require the company to offer programs and rate designs aimed at
accomplishing the goals the company itself outlines as benefits for deploying AMI meters.
This includes developing a plan to offer energy efficiency programs, eliminating
connection and reconnection fees, and rejecting extraordinary regulatory accounting
treatment that favors the company to the detriment of customers.

8 These protections are important to establish at the outset because installing new 9 AMI meters will be a significant capital expenditure that does not necessarily offer benefits 10 to customers until full deployment and extensive customer outreach and participation.

Q: What is your conclusion and recommendation regarding the Companies' proposed AMI meter deployment?

A: AMI metering is a technology that enables a utility to improve its service offerings to customers potentially for many years. However, the Commission should ensure the company offers programs and rate designs to benefit customers by requiring:

- the Companies put forward detailed plans on future rate designs, beyond pre-pay rates,
 that will enable customers to modify their behavior to reduce their bill and lower their
 energy consumption;
- 19
- the companies discontinue all connection and reconnection fees for AMI meters; and,
- 20

- rejecting the special regulatory account treatment requested by the companies.

- 21 Q: Does this conclude your testimony?
- 22 A: Yes.

VERIFICATION

The undersigned, James Owen, being first duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing testimony and that the information contained therein is true and correct to the best of his information, knowledge, and belief, after reasonable inquiry.

James Owen

Subscribed and sworn to before me by James Owen this 5th day of March, 2021.

Notary Public

My commission expires: $\frac{8}{3}/24$

ZACHARY MONTGOMERY Notary Public - Notary Seal STATE OF MISSOURI County of Boone My Commission Expires 8/3/2024 Commission #20058891

Certificate of Service

This is to certify that the electronic version of the foregoing Direct Testimony of James Owen On Behalf Of Joint Intervenors 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 March 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 filing will not be mailed until after the lifting of the current state of emergency.

Tom FitzGerald