

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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

And

In the Matter of:

ELECTRONIC APPLICATION OF LOUISVILLE)
GAS AND ELECTRIC COMPANY FOR AN)
ADJUSTMENT OF ITS RATES FOR ELECTRIC)
AND GAS SERVICE, A CERTIFICATE OF)
PUBLIC CONVENIENCE AND NECESSITY TO)
DEPLOY ADVANCED METERING) CASE NO.
INFRASTRUCTURE, APPROVAL OF CERTAIN) 2020-00350
REGULATORY AND ACCOUNTING)
TREATMENTS, AND ESTABLISHMENT OF A)
ONE-YEAR SURCREDIT)

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

Tom FitzGerald
Kentucky Resources Council, Inc.
P.O. Box 1070
Frankfort, KY 40602
(502) 551-3675
Fitz@kyrc.org

Counsel for Joint Intervenors
Mountain Association, Kentucky
Solar Energy Society, and
Kentuckians For The Commonwealth

March 31, 2021

Response of Joint Intervenors To LGE/KU Data Requests

LGE/KU DR 1:

To James Owen. Provide copies of all electronic files in native format with formulas intact used in your analysis. This includes copies of all workpapers supporting your testimony, analyses, and conclusions.

JI Response 1:

See: Owen Workpaper 1.xlsx, Owen Workpaper 2.xlsx

Witness: James Owen

LGE/KU DR 2:

Was Mr. Owen aware at the time he filed his testimony that the Companies' rate proposals in these proceedings included ECR project eliminations?

JI Response 2:

I was not aware.

Witness: James Owen

LGE/KU DR 3:

Please provide all data, including any spreadsheets used with cells unprotected and formulas intact, upon which Mr. Owen relied to calculate the "average median household incomes" in the Companies' service territories shown on pages 11 and 16 of his testimony.

JI Response 3:

See: Owen Workpaper 2.xlsx

Witness: James Owen

LGE/KU DR 4:

To: Karl R. Rábago. Provide copies of all electronic files in native format with formulas intact used in your analysis. This includes copies of all workpapers supporting your testimony, analyses, and conclusions.

JI Response 4:

Rábago workpaper at

<https://www.dropbox.com/s/lvtf0drgj8ndmwb/KRR%20WP%20Rate%20of%20Growth%20210303.xlsx?dl=0>

Witness: Karl Rábago

LGE/KU DR 5:

Provide pdf copies of the following articles or publications listed by Karl R. Rábago in his resume attached as Exhibit 1 to his direct testimony in this proceeding.

JI Response 5:

a. "The Clean Power Plan," Power Engineering Magazine (invited editorial), Vol. 119, Issue 12 (Dec. 2, 2015).

<https://www.power-eng.com/emissions/air-pollution-control-equipment-services/the-clean-power-plan/#gref>

b. "The Value of Solar Tariff: Net Metering 2.0," The ICER Chronicle, Ed. 1, p. 46 [International Confederation of Energy Regulators] (December 2013).

https://www.michigan.gov/documents/mpsc/ICERSolar1_448552_7.pdf

c. "Socio-Economic and Legal Issues Related to an Evaluation of the Regulatory Structure of the Retail Electric Industry in the State of Colorado," with Thomas E. Feiler, Colorado Public Utilities Commission and Colorado Electricity Advisory Panel (April 1, 1999).

Not available.

d. "Least Cost Electricity for Texas," State Bar of Texas Environmental Law Journal, Vol. 22, p. 93 (1992).

<https://digitalcommons.pace.edu/lawfaculty/950/>

Witness: Karl Rábago

LGE/KU DR 6:

Provide pdf copies of the testimonies submitted by Karl R. Rábago in the following regulatory proceedings identified in Exhibit 2 to his direct testimony in this proceeding.

JI Responses 6:

- a. Jul. 10, 2014, North Carolina Utilities Commission 2014 Avoided Cost Case, North Carolina Utilities Commission Docket # E 1--, Sub 140.
KRR: The exhibit contained a date error. All Mr. Rábago's testimony in NCUC E-100, Sub 140 can be found at:
https://www.dropbox.com/sh/xyz0e72ix9b1dhx/AAASX_or79LEUvYNlnK4ySw2a?dl=0
The revised and corrected exhibit can be found at:
<https://www.dropbox.com/s/jbivlp4rixu8dar/Rabago%20Prior%20Testimony%2010324.pdf?dl=0>
- b. May 22, 2015, DTE Electric Company Rate Application, Michigan PSC Case # U-17767.
<https://www.dropbox.com/s/8ps5orv7mdn5lgr/Rabago%20Direct%20DTE%20Rate%20Case%20U-17767%20150522.pdf?dl=0>
- c. Jan. 22, 2016, Northern Indiana Public Service Company (NIPSCO) Rate Case, Indiana Utility Regulatory Commission Cause No. 44688.
<https://www.dropbox.com/s/7pcy8lccovnbe3x/Rabago%20Direct%20NIPSCO%20URC%2044688%20160122.pdf?dl=0>
- d. Jun 2, 2017, Vectren Energy TDSIC Plan, Indiana URC Case No. 44910.
<https://www.dropbox.com/s/oo4dzra0kdhq6ig/R%C3%A1bago%20Direct%20Vectren%20URC%2044910%20170602.pdf?dl=0>
- e. Jul 28, 2017, Vectren Energy 2016-2017 Energy Efficiency Plan, Indiana URC Case No. 44645.
<https://www.dropbox.com/s/pixa6tumlcgavvc/R%C3%A1bago%20Direct%20Vectren%20EE%20URC%2044645%20170726.pdf?dl=0>
- f. Sep 20, 2018, Consumers Energy Company Rate Case, Michigan PSC Case No. U-20134.
<https://www.dropbox.com/s/ksr5mn0zcir6zrz/U-20134%20REVISED-%20ELPC%20Direct%20Testimony%20Karl%20Rabago.pdf?dl=0>
- g. May 10, 2019, NV Energy NV GreenEnergy 2.0 Rider, Nevada PUC, Docket Nos. 18-11015, 18-11016.
https://www.dropbox.com/s/h18zaphirmqm0nv/2019-05-15_Vote%20Solar_Notice%20of%20Errata%20Regarding%20the%20Direct%20Testimony%20of%20Karl%20R.%20Rabago.pdf?dl=0
- h. Sep 10, 2019, Interstate Power and Light Company – General Rate Case – Rebuttal, Iowa Utilities Board Docket No. RPU-2019-0001.
<https://www.dropbox.com/s/n7vr1dr4om4s64r/ELPC-IEC%20Rabago%20Direct%20Testimony.pdf?dl=0>

i. Sep. 18, 2020, Avoided Cost Proceeding for Georgia Power – Direct Testimony, Georgia Public Service Commission Docket No. 4822.
https://www.dropbox.com/s/tiqx8e3e4vh0na/GASEIA_Rabago_Direct%20Testimony_4822.pdf?dl=0

j. Sep. 20, 2020, Madison Gas and Electric – General Rate Case – Gas Rates, Wisconsin Public Service Commission Docket no. 3270-UR-123.
<https://www.dropbox.com/s/0751efow717hb1y/Rabago%20Direct%20Gas%20Earthjustice%20MGE%20Wisc%203270-UR-123%20200930.pdf?dl=0>

Witness: Karl Rábago

LGE/KU DR 7:

Please provide a complete list of all embedded cost-of-service studies performed by Mr. Rábago. Include in the response the name of each utility, the jurisdiction, the date the cost-of-service study was performed, the case or docket number in which the study was filed, as applicable.

JI Response 7:

There are no documents responsive to the request.

Witness: Karl Rábago

LGE/KU DR 8:

Please provide a complete list of all marginal cost-of-service studies performed by Mr. Rábago. Include in the response the name of each utility, the jurisdiction, the date the marginal cost-of-service study was performed, the case or docket number in which the study was filed, as applicable.

JI Response 8.:

There are no documents responsive to the request.

Witness: Karl Rábago

LGE/KU DR 9:

Please provide a complete list of all benefit-cost studies of DERs performed by Mr. Rábago. Include in the response the name of each utility, the jurisdiction, the date the benefit-cost study was performed, the

case or docket number in which the study was filed, as applicable. For each such study, please state the “full range of benefits” included in the study.

JI Response 9:

There are no documents responsive to the request.

Witness: Karl Rábago

LGE/KU DR 10:

Reference page 20 of Mr. Rábago’s testimony. Please explain in detail how the Companies’ proposed NMS-2 constitutes a “take or pay” arrangement.

JI Response 10:

See Mr. Rábago’s testimony at page 20, lines 1-10.

Witness: Karl Rábago

LGE/KU DR 11:

Reference page 21 of Mr. Rábago’s testimony. Please identify the specific sections or provisions of NMS-2 that require any form of “take or pay.”

JI Response 11:

See JI Response to LGE/KU DR 10.

Witness: Karl Rábago

LGE/KU DR 12:

Reference page 21 of Mr. Rábago’s testimony. Please explain how NMS-2 is based on “lost revenues.”

JI Response 12:

See Mr. Rábago’s testimony beginning at page 17, line 13, et seq.

Witness: Karl Rábago

LGE/KU DR 13:

Reference page 25 of Mr. Rábago's testimony. Provide copies of the pages from Bonbright's Principles of Public Utility Rates that set forth the seven bulleted principles shown on page 25 of Mr. Rábago's testimony.

JI Response 13:

See Mr. Rábago's testimony at page 25, lines 6-8 and note 56.

Witness: Karl Rábago

LGE/KU DR 14:

In a Benefit-Cost Analysis of distributed energy resources (DERs), please provide a detailed explanation of the considerations, if any, that should be given to the loss or displacement of coal mining jobs in Kentucky with the implementation of DERs.

JI Response 14:

Job impacts should be considered in a Benefit-Cost Analysis to the extent that such consideration is required and justified by state policy and in the manner determined by such policy.

Witness: Karl Rábago

LGE/KU DR 15:

Referring to page 10, line 7-8 of Mr. Rábago's testimony, please provide all data, analysis, and workpapers supporting the statement that "operation of distributed generations...results in occasional exports..." Please provide your definition of "occasional."

JI Response 15:

The extent to which customer generation results in exports is a function of the customer's load, the output of the generator, and, for ratemaking purposes the frequency of metering and netting.

Witness: Karl Rábago

LGE/KU DR 16:

The Companies own and operate, and have contracted for the output of, several solar facilities, as well as other renewable generating facilities. Should the Commission permit the Companies to collect from customers the Value of Solar (or other comparable measures of benefits for other renewable generating facilities) in excess of the Companies' costs for such facilities? If not, why not?

JI Response 16:

Mr. Rábago understands that utilities in Kentucky operate under cost of service rate making. The costs associated with generation facilities is therefore subject to cost of service rate making principles within the state. Mr. Rábago further understands that when the utility generates electricity and serves customers with that electricity, it charges the customer the full costs of such generation plus a rate of return, over the full used and useful life of the facility.

Witness: Karl Rábago

LGE/KU DR 17:

Provide a detailed list of and estimate in cents per kWh for each long-term value provided by customer-generators on KU and LG&E's systems for the energy they flow to the grid. Also, provide a detailed description of each value provided by customer-generator, as well as all workpapers supporting the dollar estimate of the value in cents per kWh.

JI Response 17:

Mr. Rábago's testimony does not purport to present a full value of solar analysis. Mr. Rábago's testimony is the utility in Kentucky bears the burden of demonstrating that its proposed rates are just, reasonable, and based on competent evidence. Mr. Rábago therefore recommended that in the absence of such a demonstration the existing net metering rate should remain in effect. Mr. Rábago's position is based on the fact that the utility is possesses the data and expertise to provide support for the rates that it proposes and that failure to submit proposals based on competent evidence does not create a burden on parties that point out deficiencies in rate proposals.

Witness: Karl Rábago

LGE/KU DR 18:

Referring to page 14 lines 19-21 of Mr. Rábago's testimony, you state that the net billing approach "greatly increases the amount of electricity that is considered excess to the customer's use." Is it not the case that when the customer-generator is, at any moment in time, producing more electricity than they are consuming that such electricity is, in fact, excess? Please explain your answer.

JI Response 18:

Mr. Rábago's testimony speaks for itself. The net billing approach differs from net metering in that it considers any instantaneous excess production as excess, and unlike net metering does not consider that energy as available for offsetting consumption during the billing period.

Witness: Karl Rábago

LGE/KU DR 19:

Please reconcile your statement on page 15, lines 8-9 that a "customer's return on investment is dramatically affected by the compensation rate paid by the utility" with your statement on page 9, lines 12-13 that "exports are incidental to an investment objective of managing energy costs." Isn't it true that the compensation rate is not "paid by the utility" but by its customers who use the excess energy of the customer-generator? Please explain your response.

JI Response 19:

Mr. Rábago believes that all payments or credits provided by the utility derive from rates collected from customers. Many value of solar studies show that paying or crediting customer generation at the retail rate pays less than the full value for such generation and creates benefits for all customers.

Witness: Karl Rábago

LGE/KU DR 20:

Referring to page 15, lines 14-15 of Mr. Rábago's testimony, why should a customer-generator be allowed to "use self-generation to offset consumption during any time in the billing period?" Isn't such an ability really a "banking" or "storage" service being provided by the utility? If so, should the customer-generator be charged for such service much as a gas pipeline charges for storage to help the customer address daily

imbalances? If you do not consider this a banking or storage service, please explain why this is the case.

JI Response 20:

Mr. Rábago is not aware of any technical or electrical analysis, experiment, demonstration, or metered study that suggests that excess generation from net metering facilities is “banked” or “stored” by the utility for the customer’s later use. The customer generator is providing a valuable service to the utility by injecting energy that otherwise would have to be generated remotely, typically with great pollution and climate change impacts, transmitted, and distributed to customers that are located very near the location of the excess customer generation.

Witness: Karl Rábago

LGE/KU DR 21:

Referring to page 27, lines 7-10 of Mr. Rábago’s testimony, please explain how the SQF rate that will be paid to customer-generators for excess electricity they push onto the grid is linked to “volatile wholesale energy prices.” Please provide all reports, analysis, and workpapers that support your response.

JI Response 21:

Mr. Rábago’s position, based on more than thirty years in the industry, is that wholesale prices are more volatile than composite prices for delivered electricity.

Witness: Karl Rábago

LGE/KU DR 22:

Referring to page 33, lines 8-21 of Mr. Rábago’s testimony, please explain how excess energy from net metered customers can be “properly planned...by the utility.”

JI Response 22:

Mr. Rábago’s testimony is that: “Excess energy from net metered customers, when properly planned and accounted for by the utility, backs down utility generation and reduces loading on transmission and distribution systems—often during peak hours when marginal losses are higher.” Mr. Rábago’s position is that while distributed generation is often

variable, it is increasingly predictable and can be planned for. In addition, and thanks to transparent and comprehensive value of solar analysis, the value of the excess energy can be fairly and honestly accounted for.

Witness: Karl Rábago

LGE/KU DR 23:

To MHC / Cathy Kuhn (#2020-00350) Provide copies of all electronic files in native format with formulas intact used in your analysis. This includes copies of all workpapers supporting your testimony, analyses, and conclusions.

JI Response 23:

2018 MHC State of Metropolitan Housing Report. "Involuntary Displacement." https://metropolitanhousing.org/wp-content/uploads/2020/10/2018_SMHR_FINAL2_Lo_Res.pdf

2019 State of Metropolitan Housing Report. "22,000 Equities: Addressing Racial Gaps in Homeownership and Wealth." https://metropolitanhousing.org/wp-content/uploads/2020/10/2019-State-of-Metropolitan-Housing-Report_LR.pdf

Konisky D and Carlye S. (June 2020). "Survey of Household Energy Insecurity in Time of COVID Preliminary Results of Wave-1" O'Neill School of Public and Environmental Affairs at Indiana University. <https://oneill.indiana.edu/doc/research/energy-insecurity-survey-june-2020.pdf>

Louisville Gas and Electric Company. Customers Eligible for Disconnection and Past Due Customers. January 2019 through December 2020. Case No. 2020-00350.

Attachment to Response to MHC/KFTC/KSES Question No. 36.
Metrogovernment Press Release. (November 16, 2020). "Mayor proposes \$10 million initiative to help those behind on utility bills as a result of COVID-19."
<https://louisvilleky.gov/news/mayor-proposes-10-million-initiative-help-those-behind-utility-bills-result-covid-19>

Pew Research Center. (Sept 21, 2020). "Economic Fallout From COVID-19 Continues To Hit Lower-Income Americans the Hardest."
<https://www.pewresearch.org/social-trends/2020/09/24/economic-fallout-from-covid-19-continues-to-hit-lower-income-americans-the-hardest/>

Second Round of Data requests. Attachment to MA-KFTC-KSES-2 Question No. 3. Responding Witness John L Wolfe. Case No. 2020-00349. Page 9 of 27.

SSI Federal Payment Amounts

<https://www.ssa.gov/oact/cola/SSlamts.html>

Witness Cathy Kuhn

Respectfully submitted,

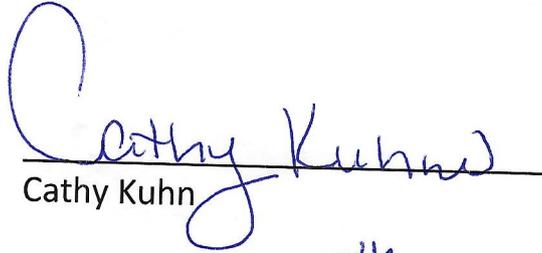


Tom FitzGerald
Kentucky Resources Council
P.O. Box 1070
Frankfort, KY 40602
(502) 551-3675
FitzKRC@aol.com

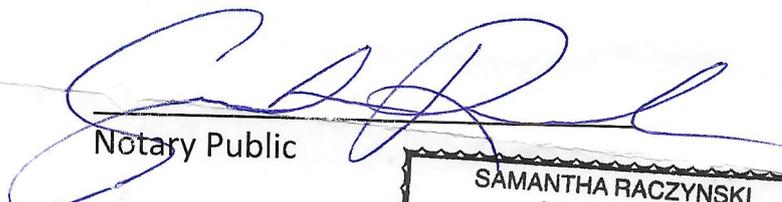
*Counsel for Joint Intervenors,
Mountain Association, Kentuckians
for the Commonwealth, and
Kentucky Solar Energy Society*

VERIFICATION

The undersigned, Cathy Kuhn, after being first duly sworn, deposes and says that she has personal knowledge of the matters set forth in her foregoing Responses To Data Requests propounded by the Commission Staff and by LG&E and KU and that the information contained therein is true and correct to the best of her information, knowledge, and belief, after reasonable inquiry.


Cathy Kuhn

Subscribed and sworn to before me by Cathy Kuhn this 21st day of March 2021.


Notary Public

My commission expires: 03/16/2024

SAMANTHA RACZYNSKI
Notary Public
Kentucky-State at Large
Commission Number KYNP5121
My Commission Expires March 16, 2024

VERIFICATION

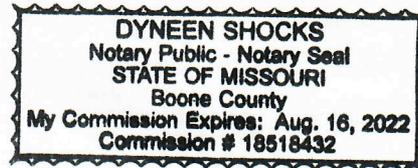
The undersigned, James Owen, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing responses and that the information contained therein is true and correct to the best of his information, knowledge, and belief, after reasonable inquiry.


James Owen

Subscribed and sworn to before me by James Owen this 29 day of March, 2021.


Notary Public

My commission expires: August 16, 2022



VERIFICATION

The undersigned, Karl R. Rábago, after being first duly sworn, deposes and says that he has personal knowledge of the matters set forth in his foregoing Responses to Data Requests propounded by the Commission Staff and by LG&E and KU and that the information contained therein is true and correct to the best of his information, knowledge, and belief, after reasonable inquiry.


Karl R. Rábago

Subscribed and sworn to before me by Karl R. Rábago this 31st day of March 2021.


Notary Public

My commission expires: 3-11-2024

TYLER HALL
Notary Public
State of Colorado
Notary ID # 20204010238
My Commission Expires 03-11-2024

CERTIFICATE OF SERVICE

This is to certify that the electronic version of the foregoing is a true and accurate copy of the same document that will be filed in paper medium; that the electronic filing has been transmitted to the Commission on March 31, 2021; that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding; and that in accordance with the March 16, 2020 Commission Order in Case No. 2020-00085 an original and ten copies in paper medium of this *Statement Regarding Receipt of Electronic Transmissions* will not be mailed until after the lifting of the current state of emergency.



Tom FitzGerald