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 ELECTRIC AND GAS RATES AND APPROVAL OF CERTAIN REGULATORY AND ACCOUNTING TREATMENTS	)))))))	**CASE NO. 2025-00114**

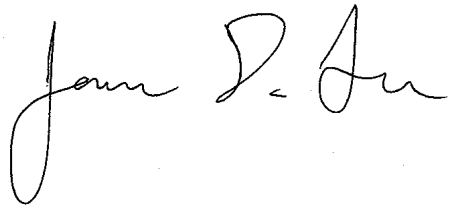
RESPONSES OF JOINT INTERVENORS KENTUCKIANS FOR THE COMMONWEALTH, KENTUCKY SOLAR ENERGY SOCIETY, AND METROPOLITAN HOUSING COALITION TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION [DATED SEPTEMBER 11, 2025]

Dated: September 23, 2025

VERIFICATION

The undersigned, James David Fine, 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 David Fine_____



Subscribed and sworn to before me by James David Fine this 23rd day of September, 2025.

James Anthony Mason

Notary Public

My commission expires: 08/08/2029

DESCRIPTION OF ATTACHED DOCUMENT

Title or Type of Document: Jurat

Document Date: 09/23/2025

Number of Pages (including notarial certificate): 2

State of Texas

County of Fort Bend

NOTARY PUBLIC STATE OF TEXAS

James Anthony Mason

ID NUMBER
133150597
COMMISSION EXPIRES
August 8, 2029

Sworn to and subscribed before me

on 09/23/2025 by James David Fine.

James Anthony Mason

Electronically signed and notarized online using the Proof platform.

VERIFICATION

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

Subscribed and sworn to before me by Roger Colton this 23 day of September 2025.

Notary Public

HARWOOD E. SOUL JR.
Notary Public
Commonwealth of Massachusetts
My Commission Expires 10/30/2031

My commission expires: _____

JOINT INTERVENORS KENTUCKIANS FOR THE COMMONWEALTH, KENTUCKY SOLAR ENERGY SOCIETY, AND METROPOLITAN HOUSING COALITION

RESPONSE TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION
Dated September 11, 2025

Case No. 2025-00114

Question No. 1.1

Q-1.1 Refer to the Direct Testimony of James Fine (Fine Direct Testimony), page 23, lines 15-16. Explain the use of the effective load carrying capacity (ELCC) and the PJM Net Cost of New Entry (Net CONE) given that Kentucky Utilities Company (KU) is not a member of PJM or another regional transmission organization (RTO).

A-1.1 RESPONSE:

Mr. Fine does not use NetCONE as the basis for his recommended avoided cost of generation. Rather, he provides NetCONE calculations as a comparative measure of the reasonableness of the Kentucky Utilities Company and Louisville Gas and Electric ("KU" and "LG&E", respectively) valuation of avoided capacity costs. He uses PJM Net CONE as a proximate and valid measure of avoided generation capacity cost in Kentucky.[1] A large portion of Kentucky is within the PJM independent system operator ("ISO") territory and is served by utilities that do participate in PJM markets.

In the prior directive, the Commission directed LG&E-KU to base avoided capacity costs on a simple cycle natural gas generation station.[2] The reference generation in Lazard's NetCONE calculations is for a firming resource in the major ISO territories. For PJM, ERCO, SPP and MISO, the NetCONE calculation is also based on a natural gas power plant, referred to as a firming natural gas peaker plant. The cost profiles for these natural gas generation resources are very similar to the combined cycle gas turbine costs ($125.66) used by KU.[3]

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[1] Final Order[s], *In the Matter of Electronic Application[s] of Kentucky Utilities Company [and]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-Year Surcredit*, Case Nos. 2020-00349 and 2020-00350, at 32 (Sept. 24, 2021) ("…valuing the avoided energy and generation costs to a utility based on market prices is a valid method…").
[2] Case No. 2020-00349/Case No. 2020-00350 Sept. 24, 2021 Final Order at 32, ("the Commission adopts the use of a simple cycle CT as the proxy for estimating avoided generation capacity costs.")
[3] Direct Testimony of Charles R. Schram, Exhibit CRS-7.

The LG&E-KU service areas are interconnected to other Kentucky utilities, which in turn are connected to the broader PJM balancing area. Therefore, PJM prices indicate what LG&E-KU would be paying for capacity should incremental capacity resources be acquired from neighboring utilities and reflect what LG&E-KU should expect when it requests bids for new generation capacity in a competitive interconnected marketplace. The long-term future of LG&E-KU depends, in part, on neighboring utilities that participate in regional energy markets. If LG&E-KU calculates a cost of new generation that deviates significantly from other nearby interconnected utilities, it shows that LG&E-KU can be more expansive and innovative in the search for generation solutions. In fact, LG&E-KU has a responsibility to do so as it plans to deliver least-cost electricity to customers.

The fact that LG&E-KU plans to close existing resources is not the right proxy for avoided generation capacity since the utility has clearly shown in this proceeding that it is planning to finance additional capacity through EHLF tariff for large loads. Rather, it is what LG&E-KU would be building in the future, and what new investments can be avoided by distributed photovoltaic ("DPV") systems once it achieves significant scales of penetration.

Mr. Fine calculated Effective Load Carrying Capacity ("ELCC") as the average generation for a resource divided by rated capacity during the system peak hour. This is the industry standard approach. He analyzed average generation for solar power in August for one hour from 2pm – 3pm according to photovoltaic ("PV") Watts for Louisville, Kentucky. Refer to Fine workpapers, Excel file *NMS2AvoidedCosts.Fine.2025_00113_00114.xls*, being uploaded separately.

WITNESS: James Fine

JOINT INTERVENORS KENTUCKIANS FOR THE COMMONWEALTH, KENTUCKY SOLAR ENERGY SOCIETY, AND METROPOLITAN HOUSING COALITION

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Question No. 1.2

Q-1.2 Refer to Fine Direct Testimony, page 19, lines 7-14. Explain how KU's lack of membership in an RTO affects the analysis in regard to calculating the avoided cost of energy price risk.

A-1.2 RESPONSE:

Whether or not a utility is in a regional transmission operator ("RTO"), it is exposed to energy price risk. There are two ways to measure that risk: fuel price variability and scarcity pricing risks. To the extent that the KU portfolio is more reliant on fossil fuel prices, the greater the exposure to energy price risk regardless of whether the utility is in an RTO. This risk was a key motivation for enacting the Public Utilities RegulatoryPolicies Act ("PURPA") in 1978, long before RTOs were created. By comparison, the cost of the sun never changes: it is always free.

The second risk is scarcity pricing. If a utility is in an RTO, this price premium is created by generators bidding above their operating costs during periods of high loads due to inelastic demand. Purchasing this power avoids power shortfalls for customers. If a utility is not in an RTO, customers bear that economic cost in the form of risk of lost service. Instead of paying for higher priced resources via purchases from an RTO, customers' services are at risk of being interrupted. If, instead, KU purchased the higher priced resources from neighboring utilities who sell their power at prices above operating costs, then customers would be exposed to scarcity risk in the same manner as those served by utilities participating in an RTO.

WITNESS: James Fine

JOINT INTERVENORS KENTUCKIANS FOR THE COMMONWEALTH, KENTUCKY SOLAR ENERGY SOCIETY, AND METROPOLITAN HOUSING COALITION

RESPONSE TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION
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Case No. 2025-00114

Question No. 1.3

Q-1.3 Refer to Fine Direct Testimony, page 29, lines 14-18. Explain whether the methodology provided for avoided transmission costs appropriately accounts for KU's planned investments in transmission projects. If not, explain how this might be accounted for.

A-1.3 RESPONSE:

Planned transmission investments fail to account for the full incremental costs of the transmission system. Transmission revenue requirements have historically risen faster than what can be explained solely by identified planned transmission investments.[4] This occurs because other ancillary system reinforcements are caused indirectly by these additions. Virtually all transmission investment is created by generation additions. A study of the California Independent System Operator transmission costs show that 88% of the incremental cost can be explained by generation additions.[5]

The only way to look at the full cost of transmission additions is to examine past costs, as indicated in transmission rates. My method for avoided transmission costs is based on what KU historically paid for transmission services. It is reasonable to translate from these calculations how DPV avoids those costs (and, in fact, even more due to avoided transmission losses and reserve margins) that would otherwise be transmitted.

The long-term planning and modeling are based on assumptions of very low levels of DPV (and distributed energy resources ("DER")) capacities. This can be a self-fulfilling prophecy, but it is not in the best interest of ratepayers because DPV and DER are demonstrably economically and environmentally superior to central system gas plants.

WITNESS: James Fine

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[4] Richard McCann, "CAISO Transmission Costly for New Generation," *Economics Outside the Cube*, (Apr. 21, 2025), https://mcubedecon.com/2025/04/21/caiso-transmission-costly-for-new-generation/.
[5] *Id.*

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Dated September 11, 2025

Case No. 2025-00114

Question No. 1.4

Q-1.4 Refer to Fine Direct Testimony, page 30, lines 9-14. Explain whether the methodology provided for avoided distribution costs appropriately accounts for KU's planned investments in distribution projects. If not, explain how this might be accounted for.

A-1.4 RESPONSE:

Mr. Fine used the information adopted by the Commission with standard escalation rates based on the Consumer Price Index. Like the Commission, he finds that to be an acceptable proxy.

WITNESS: James Fine

JOINT INTERVENORS KENTUCKIANS FOR THE COMMONWEALTH, KENTUCKY SOLAR ENERGY SOCIETY, AND METROPOLITAN HOUSING COALITION

RESPONSE TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION
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Case No. 2025-00114

Question No. 1.5

Q-1.5 Refer to Fine Direct Testimony, page 40, line 19, through page 41, line 11.

a. Define the terms instantaneous netting and monthly netting.

b. Explain how KU's method of netting would be considered instantaneous netting.

c. Provide an example of a bill credit calculation using instantaneous netting and monthly netting.

A-1.5 RESPONSE:

a. According to a Moody's report filed with the Companies' Applications in its 2020 rate cases:

> Under net metering, a customer receives a credit from the utility for all of its generation at the full (or nearly full) retail rate and pays only for power taken, also at the retail rate, resulting in a materially reduced monthly bill relative to a customer with no distributed generation. … California is an example of a state employing net solar metering in its rate structure, whereas in New Jersey, which has the second largest residential solar program in the US, utilities buy power at a price closer to their blended cost of generation, which is much lower than the retail rate.[6]

The "net metering" method described above is what is meant by "monthly netting." The New Jersey method described above, wherein a utility buys all power produced to the

[6] Case No. 2020-00349, *Electronic Application of Kentucky Utilities Company for an Adjustment of Its Electric 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-Year Surcredit* and Case No. 2020-00350, *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-Year Surcredit*, ("2020 Rate Cases"), Testimony of Daniel K. Arbough Treasurer Kentucky Utilities Company and Louisville Gas and Electric Company at DAK-3 p. 42 (Nov. 25, 2020).

grid at a rate lower than their retail rate, is what is meant by "instantaneous netting." In the context of Kentucky law, monthly netting is required, but the difference between power generated and fed back into the grid over a billing period and electricity consumed over a billing period may be priced at a lower "dollar value," rather than the full retail rate.[7]

b. LG&E and KU's method is currently instantaneous netting, not monthly as directed by the Commission. As mandated in the Companies' 2020 Rate Cases:

> Consistent with our finding in Case No. 2020-00174 and KRS 278.465(4), the Commission finds that LG&E/KU should continue to net the total energy consumed and the total energy exported by eligible customer-generators over the billing period in NMS 2 consistent with the billing period netting period established in NMS 1. The Commission further finds that, because the energy charge is based upon electricity consumed, the energy charge and any riders that are based on a per kWh charge should be netted against energy exported pursuant to KRS 278.465(4).[8]

This portion of the order remained effectively unchanged on rehearing, still mandating netting over the billing period, and making clear that excess generation may be credited at a dollar value as allowed by statute:

> Consistent with our finding in Case No. 2020-00174 and KRS 278.465(4), the Commission finds that LG&E/KU should continue to net the dollar value of the total energy consumed and the dollar value of the total energy exported by eligible customer generators over the billing period in NMS 2 consistent with the billing period netting period established in NMS 1.[9]

As further explained in its original order, the reason for rejecting the proposal:

> is because LG&E/KU's proposed instantaneous credit for all energy exported on to the grid is inconsistent with the plain language of KRS 278.465(4), which provides that "net metering means the difference between" the dollar value of all electricity generated by an eligible customer-generator that is exported to the grid over a billing period and the dollar value of all electricity consumed by the eligible customer-generator over the same billing period.[10]

This portion of the Commission's Order was not modified on rehearing.

c. See *2025-09-23-netting-eg.xlsx*, being uploaded separately, for a simplified example. Note that this example uses the proposed rates for LG&E, and omits additional charges

[7] KRS 278.465(4).
[8] 2020 Rate Cases, Order at 48 (Sep. 24, 2021).
[9] 2020 Rate Cases, Order at 25 (Nov. 04, 2021).
[10] 2020 Rate Cases, Order at 48 (Sep. 24, 2021).

for DSM, FAC, and Environmental surcharges, each of which should be offset by the monthly kWh credit for exports as mandated by the Commission (see previous answer), but are not offset at all under the methodology used by the Companies, termed here as "instantaneous" netting.

WITNESS: James Fine

JOINT INTERVENORS KENTUCKIANS FOR THE COMMONWEALTH, KENTUCKY SOLAR ENERGY SOCIETY, AND METROPOLITAN HOUSING COALITION

RESPONSE TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION
Dated September 11, 2025

Case No. 2025-00114

Question No. 1.6

Q-1.6 Refer to the Direct Testimony of Roger D. Colton (Colton Direct Testimony), page 26, lines 6-9. Explain why a scenario including two adults was not examined and included in the testimony. Additionally, provide the results in excel format with two adults, one infant and two adults, one school-aged child.

A-1.6 RESPONSE:

Mr. Colton, using data from the most recent American Community Survey (Table B25010, 2023) first distributed the average household size by the zip codes identified by LGE/KU as comprising their respective service territories and having residential customers (Response to Joint Intervenor Request 1-1 and Request 1-2). The results showed, as the Table below documents, that there are no (0) zip codes in the LGE/KU service territory with an average household size of four people or more (two adults, two kids). Indeed, of the 296 zip codes, 273 had an average household size of 3 persons or less. Of the 296 zip codes, 250 had an average household size of more than 2 persons but fewer than 3 persons. Using different household compositions with three persons thus seemed to be most reasonable.

Avg # HH members	Count of zip codes
<1 or (blank)	8
1-1.5	3
1.5-2	12
2-2.5	122
2.5-3	128
3-3.5	21
3.5-4	2

Having said that, in response to the specific request for results for additional household compositions, attached to this response is the complete Kentucky self-sufficiency standard (SSS) data base. (KY2023-SSS.xls)

WITNESS: Roger Colton

JOINT INTERVENORS KENTUCKIANS FOR THE COMMONWEALTH, KENTUCKY SOLAR ENERGY SOCIETY, AND METROPOLITAN HOUSING COALITION

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Question No. 1.7

Q-1.7 Refer to the Colton Direct Testimony, page 44, lines 21-22. Explain how an annual budget of $200,000 was chosen.

A-1.7 RESPONSE:

The $200,000 budget was selected as a reasonable limit on expenditures for a pilot project. As indicated in Mr. Colton's direct testimony, differing populations (aged, families with children, Black, Hispanic, urban/rural) should be reached through different entities and through different initiatives. As Mr. Colton's testimony stated, "Trusted sources varied by community and culture." The annual budget thus needed to be sufficiently large to fund different agencies directed to different populations.

Moreover, extensive research shows that multiple contacts and in-person assistance are required for hard-to-reach populations. One Institute of Medicine study "identified several approaches as successful in activating consumers to move from outreach and education to sign-up." The study said "the most important of these were the need for multiple contact points and for in-person assistance for as many of these encounters as possible."[11] The budget, in other words, must be sufficient to compensate the outreach entities for staff-time. It cannot simply be a mass media campaign.

WITNESS: Roger Colton

[11] Parker, et al. *Successfully Engaging Hard-to-Reach Populations in Health Insurance: A Focus on Outreach, Sign Up and Retention, and Use*. Institute of Medicine, Roundtable on Health Literacy, Collaborative on Health Literacy and Access, Health Care Coverage, and Care, Washington D.C.

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RESPONSE TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION
Dated September 11, 2025

Case No. 2025-00114

Question No. 1.8

Q-1.8 Refer to the Colton Direct Testimony, page 49, lines 20-22.

a. Explain how waiving miscellaneous fees for low-income customers is fair, just and reasonable from a utility's perspective.

b. Explain how waiving miscellaneous fees for low-income customers is fair, just and reasonable to residential customers who are not low-income.

A-1.8 RESPONSE:

A-1.9 Mr. Colton's direct testimony did not propose to simply waive "miscellaneous fees" for low-income customers. Mr. Colton's testimony instead identified two specific fees that should be waived (recognizing that the Companies already waive late payment charges, which waiver is not at issue in this proceeding): (1) disconnection, and (2) reconnection fees. Waiving disconnection and reconnection fees for low-income customers is "fair, just and reasonable from a utility's perspective" because, as Mr. Colton testified on page 49, lines 5-6, "Imposing such fees generates several adverse impacts to the utilities as utilities." Without repeating the entirety of Mr. Colton's testimony in this regard, he did summarize his analysis by noting that "Whether or not a disconnection / reconnection fee has a cost basis, in other words, it makes financial sense to the utility not to impose such fees on low-income customers."

The reasonableness of the proposal to waive disconnection and reconnection fees to low-income customers is bolstered by the fact that, as Mr. Colton testified, "While [LGE/KU] substantially and routinely relies on collection activities such as nonpayment disconnections. . .as a means to collect money, it has never established, or even

considered, the extent to which, or even whether, those activities reduce residential bad debt, [12] reduce residential arrears,[13] or accelerate residential payments.[14]"

Moreover, as Mr. Colton testified, even though LGE/KU routinely rely on collection activities such as nonpayment disconnections as a means to collect money, neither utility has ever considered *why* customers do not contact the utility in response to shutoff notices,[15] let alone studied or considered the effectiveness of shutoff notices as a method of communicating with its customers in arrears.[16] It has never developed a study or report which: (1) characterizes patterns of nonpayment; (2) identifies the characteristics of nonpayers; (3) identifies predictors of nonpayment; (4) identifies strategies to reduce nonpayment; or (5) identifies early indicators of nonpayment.[17]

a. See, response to Request 8.a.

WITNESS: Roger Colton

[12] KU Response to Joint Intervenors Request Q-1.60; LG&E Response to Joint Intervenors Request Q1.64.
[13] KU Response to Joint Intervenors Request Q-1.61; LG&E Response to Joint Intervenors Request Q1.65.
[14] KU Response to Joint Intervenors Request Q-1.62; LG&E Response to Joint Intervenors Request Q1.66.
[15] KU Response to Joint Intervenors Request Q-1.56; LG&E Response to Joint Intervenor Request Q1.60
[16] KU Response to Joint Intervenors Request Q-1.57; LG&E Response to Joint Intervenor Request Q1.61.
[17] KU Response to Joint Intervenors Request Q-52; LG&E Response to Joint Intervenor Request Q1.53; note, the Companies did produce an attachment in response to Request 1-52/1-53, but it does not (1) characterize patterns of nonpayment; (2) identify the characteristics of nonpayers; (3) identify predictors of nonpayment; (4) identify strategies to reduce nonpayment; or (5) identify early indicators of nonpayment.

JOINT INTERVENORS KENTUCKIANS FOR THE COMMONWEALTH, KENTUCKY SOLAR ENERGY SOCIETY, AND METROPOLITAN HOUSING COALITION

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Question No. 1.9

Q-1.9 Refer to the Colton Direct Testimony, page 62, lines 14–18. Provide examples of utility prepayment tariffs that offer discounts to participants.

A-1.10 RESPONSE:

Mr. Colton has undertaken no survey or study of "utility prepayment tariffs" to determine which, if any, utility prepayment tariffs offer discounts to participants.

WITNESS: Roger Colton

JOINT INTERVENORS KENTUCKIANS FOR THE COMMONWEALTH, KENTUCKY SOLAR ENERGY SOCIETY, AND METROPOLITAN HOUSING COALITION

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Question No. 1.10

Q-1.10 Refer to the Fine Direct Testimony, pages 18-19. Explain the benefits of including the energy price risk hedge has for ratepayers.

A-1.11 RESPONSE:

When electricity production is based on renewable energy resources such as wind and solar insolation, there is no price volatility. As described in response to Staff DR Question #2, energy price risk takes two forms: (1) fuel price variability and (2) scarcity pricing risks. Customers are exposed to risks associated with fossil fuel price variability when the generation portfolio is dependent on fossil fuels. When scarcity pricing occurs, customers face an additional risk of loss of service.

WITNESS: James Fine

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Question No. 1.11

Q-1.11 Refer to the Fine Direct Testimony, page 15. Provide the calculation of avoid costs based solely on Commission precedent.

A-1.12 RESPONSE:

Commission precedent calls for calculation of all of the costs listed in Table JF-3 with the exception of fuel price hedging and reserve margin avoided costs. That results is provided in the fifth row of Table JF-3 highlighted in yellow:

Total Avoided Costs for Customer-Generators	KU	LG&E
Category	$/kWh	$/kWh
Total Avoided Costs	0.18198	0.17895
Total Avoided Cost Without Cost of Carbon[18]	0.11545	0.11241
Total Avoided Cost Without Cost of Carbon and Without Fuel Price Hedge Value	0.10145	0.09841

WITNESS: James Fine

[18] Note the Commission did order a carbon cost in its previous rate for LG&E and KU, but set it at a level of $0.01338 per kWh, based on the methodology set out in Case No. 2020-00174. 2020 Rate Cases, Order at 55-56 (Sep. 24, 2021). This rate, escalated for inflation, should be included at a minimum for compliance with Commission precedent regarding the cost of carbon.