

**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 AND)	CASE NO. 2025-00113
APPROVAL OF CERTAIN)	
REGULATORY AND)	
ACCOUNTING TREATMENTS)	

In the Matter of:

ELECTRONIC APPLICATION OF)	
LOUISVILLE GAS AND ELECTRIC)	
COMPANY FOR AN ADJUSTMENT)	
OF ITS ELECTRIC AND GAS)	CASE NO. 2025-00114
RATES AND APPROVAL OF)	
CERTAIN REGULATORY AND)	
ACCOUNTING TREATMENTS)	

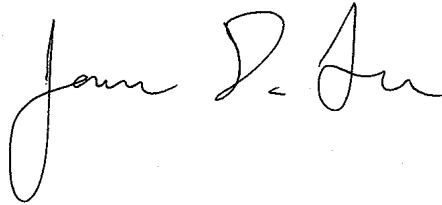
**RESPONSES OF JOINT INTERVENORS KENTUCKIANS
FOR THE COMMONWEALTH, KENTUCKY SOLAR
ENERGY SOCIETY, METROPOLITAN HOUSING
COALITION, AND MOUNTAIN ASSOCIATION TO JOINT
DATA REQUESTS OF KENTUCKY UTILITIES COMPANY
AND LOUISVILLE GAS AND ELECTRIC COMPANY
[DATED SEPTEMBER 12, 2025]**

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__

A handwritten signature in black ink, appearing to read "James D. Fine", written over a horizontal line.

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



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.

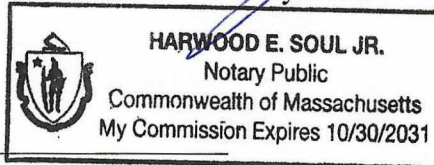
VERIFICATION

The undersigned, ROGER COLTON being first duly sworn, deposes and says that its 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 its information, knowledge, and belief, after reasonable inquiry.

RC

Subscribed and sworn to before me by ROGER COLTON this 23 day of SEPTEMBER 2025.

Harwood E. Soul Jr.
Notary Public



My commission expires: _____

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

**RESPONSE TO LG&E-KU'S FIRST REQUEST FOR
INFORMATION**

Dated September 11, 2025

Case No. 2025-00113 &

Case No. 2025-00114

Question No. 1.1

Q-1.1 In Excel spreadsheet or other format, with all formulas, columns and rows unprotected and fully accessible, please provide all workpapers and source documents not previously provided relied upon by Joint Intervenors in this matter.

A-1.1 RESPONSE:

See Responses to Requests 5 & 9.

WITNESS: Counsel

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

**RESPONSE TO COMMISSION LG&E-KU'S FIRST
REQUEST FOR INFORMATION
Dated September 11, 2025**

**Case No. 2025-00113 &
Case No. 2025-00114**

Question No. 1.2

Q-1.2 Other than Mr. Colton and Mr. Fine, please identify any persons, including experts, whom Joint Intervenors have consulted or retained with regard to evaluating the Companies' Applications in these proceedings.

A-1.2 RESPONSE:

Objection. The request seeks information which is subject to the attorney work-product doctrine pursuant to Ky. R. Civ. Pro. 26.02(3) and lawyer-client privilege under Ky. R. Evid. 503.

WITNESS: Counsel

**JOINT INTERVENORS KENTUCKIANS FOR THE
COMMONWEALTH, KENTUCKY SOLAR ENERGY
SOCIETY, METROPOLITAN HOUSING COALITION AND
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**RESPONSE TO COMMISSION LG&E-KU'S FIRST
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**Case No. 2025-00113 &
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Question No. 1.3

Q-1.3 For each person identified in response to Request No. 2 above, please state:

- a. the subject matter of the discussions, consultations, or evaluations;
- b. the written opinions of such persons regarding the Companies' Applications;
- c. the facts to which each person relied upon; and
- d. a summary of the person's qualifications to render such discussions, consultations, or evaluations.

A-1.3 RESPONSE:

Objection. The request seeks information which is subject to the attorney work-product doctrine pursuant to Ky. R. Civ. Pro. 26.02(3) and lawyer-client privilege under Ky. R. Evid. 503.

WITNESS: Counsel

**JOINT INTERVENORS KENTUCKIANS FOR THE
COMMONWEALTH, KENTUCKY SOLAR ENERGY
SOCIETY, METROPOLITAN HOUSING COALITION AND
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**RESPONSE TO COMMISSION LG&E-KU'S FIRST
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**Case No. 2025-00113 &
Case No. 2025-00114**

Question No. 1.4

Q-1.4 For each person identified in response to Request No. 2 above, please identify all proceedings in all jurisdictions in which the witness or person has offered evidence, including but not limited to, pre-filed testimony, sworn statements, and live testimony or analysis. For each response, please provide the following:

- a. the jurisdiction in which the testimony, statement, or analysis was pre-filed, offered, given, or admitted into the record;
- b. the administrative agency or court in which the testimony, statement, or analysis was pre-filed, offered, admitted, or given; 5
- c. the date(s) the testimony, statement, or analysis was pre-filed, offered, admitted, or given;
- d. the identifying number for the case or proceeding in which the testimony, statement, or analysis was pre-filed, offered, admitted, or given; and
- e. whether the person was cross-examined.

A-1.4 RESPONSE:

Objection. The request seeks information which is subject to the attorney work-product doctrine pursuant to Ky. R. Civ. Pro. 26.02(3) and lawyer-client privilege under Ky. R. Evid. 503.

WITNESS: Counsel

**JOINT INTERVENORS KENTUCKIANS FOR THE
COMMONWEALTH, KENTUCKY SOLAR ENERGY
SOCIETY, METROPOLITAN HOUSING COALITION AND
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**Case No. 2025-00113 &
Case No. 2025-00114**

Question No. 1.5

Q-1.5 Provide copies of all electronic files in native format with formulas intact used in your testimony and exhibits. This includes copies of all workpapers supporting your testimony, analyses, and conclusions.

A-1.5 RESPONSE:

See excel file *NMS2AvoidedCosts.Fine.2025_00113_00114.xls*, produced in response to Commission Staff's First Request for Information to Kentuckians For The Commonwealth, Kentucky Solar Energy Society, and Mountain Association in Case No. 2025-00113, and Commission Staff's First Request for Information to Kentuckians For The Commonwealth, Kentucky Solar Energy Society, and Metropolitan Housing Coalition in Case No. 2025-00114, Response 1.1.

WITNESS: James Fine

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

**RESPONSE TO COMMISSION LG&E-KU'S FIRST
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**Case No. 2025-00113 &
Case No. 2025-00114**

Question No. 1.6

Q-1.6 See Mr. Fine's testimony at page 2, lines 2-3. Please provide copies of or links to all expert testimony Mr. Fine has given, including both written and oral testimony.

A-1.6 RESPONSE:

California

Order Instituting Rulemaking on the Commission's Own Motion to Conduct a Comprehensive Examination of Investor Owned Electric Utilities' Residential Rate Structures, the Transition to Time Varying and Dynamic Rates, and Other Statutory Obligations; Rulemaking 12-06-013, Filed June 21, 2012

Illinois

THE CITIZENS UTILITY BOARD and THE ENVIRONMENTAL DEFENSE FUND (Petition to Initiate a Proceeding to Investigate the Adoption of a Utility Time of Use Rate), CUB/EDF Exhibit 1.0: Direct Testimony of Dr. James Fine, Docket No. 15-0100 (filed Feb. 13, 2015), <https://www.icc.illinois.gov/docket/P2015-0100/documents/224930/files/397026.pdf>

Florida

Commission Review of Numeric Conservation Goals; Dockets 130199-Ei (Florida 5 Power & Light Company), 130200-Ei 7 (Duke Energy Florida, Inc.). (Tampa 10 Electric Company). 130202-Ei 12 (Gulf Power Company). 130203-Ei, <https://www.psc.state.fl.us/library/filings/2014/04294-2014/04294-2014.pdf>

WITNESS: James Fine

**JOINT INTERVENORS KENTUCKIANS FOR THE
COMMONWEALTH, KENTUCKY SOLAR ENERGY
SOCIETY, METROPOLITAN HOUSING COALITION AND
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**RESPONSE TO COMMISSION LG&E-KU'S FIRST
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**Case No. 2025-00113 &
Case No. 2025-00114**

Question No. 1.7

Q-1.7 Has Mr. Fine identified any actual, particular distribution or transmission investment the Companies (a) have avoided due to Rider NMS-2 customers or (2) will be able to avoid through the end of the test year at issue in this case due to Rider NMS-2 customers? For each such particular avoided investment, please provide all the specific identifying information Mr. Fine possesses, explain in detail how he determined the investment was or will be avoided, and provide all workpapers supporting Mr. Fine's assertions.

A-1.7 RESPONSE:

See Commission Staff's First Request for Information to Kentuckians For The Commonwealth, Kentucky Solar Energy Society, and Mountain Association in Case No. 2025-00113, and Commission Staff's First Request for Information to Kentuckians For The Commonwealth, Kentucky Solar Energy Society, and Metropolitan Housing Coalition in Case No. 2025-00114, , Responses 1.3 and 1.4.

Planned transmission investments fail to account for the full incremental costs of the transmission system. Transmission revenue requirements in Kentucky have historically risen faster than what can be explained solely by identified planned transmission investments.¹ 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.²

¹ "Prepared Supplemental Testimony of Richard McDann, Ph.D on Behalf of the Kentucky Solar Energy Industry Association," Application of Kentucky Power Company, Case No. 2020-00174, February 25, 2021.

² Richard McCann, "CAISO Transmission Costly for New Generation," *Economics Outside the Cube*, <https://mcubedecon.com/2025/04/21/caiso-transmission-costly-for-new-generation/>, April 21, 2025.

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 LG&E/KU historically paid for transmission services. It is reasonable to translate from these calculation how DPV avoids those costs because the in-site generation directly offsets an equivalent amount of energy (and in fact even more due to avoided transmission losses and reserve margins) that would otherwise be transmitted.

The long-term planning and modeling is based on assumptions of very low levels of DPV (and 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.

For avoided distribution costs, I used the information adopted by the Commission with standard escalation rates based on the Consumer Price Index. Like the Commission, I find that to be an acceptable proxy.

WITNESS: James Fine

**JOINT INTERVENORS KENTUCKIANS FOR THE
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SOCIETY, METROPOLITAN HOUSING COALITION AND
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**Case No. 2025-00113 &
Case No. 2025-00114**

Question No. 1.8

Q-1.8 See Mr. Fine's testimony at page 15, Table JF-3.

- a. Does Mr. Fine agree that, after adjusting for line losses, a kWh of energy produced by utility-scale solar provides all the same benefits as a kWh of produced by distributed solar with the exception of the transmission, distribution, and jobs benefits components shown in Table JF-3? If not, please explain in detail.
- b. Please state how much of the total avoided cost shown in Table JF-3 is avoided social (or societal) cost of carbon.

A-1.8 RESPONSE:

- a. Comparison of utility-scale and distributed PV is not a part of my testimony and would require additional research to fully address the question.

With that said, several obvious differences are worth noting, including but not limited to:

- DPV avoids reserve margin requirements whereas utility-scale PV is part of the generation portfolio that includes reserve margins. In the LG&E/KU case, reserve margins are forecasted to reach 29% in the coming years.
- DPV avoids land use impacts associated with utility-scale PV and supporting transmission and substations, including conversion of agricultural lands and greenfields.
- As a portfolio, DPV has reliability benefits that are superior to a few large plants. Local benefits include improved distribution system reliability with lower thermal stressing, and when storage is added, resilience is increased compared to grid-scale resources.

- While utility-scale PV may appear to be lower cost, the actual costs to ratepayers include a return on investment for KU. This additional revenue to KU shareholders is paid for by all KU customers. By comparison, DPV investments are made by the customer and their private costs are not socialized to all ratepayers.
- b. My calculation of avoided cost of carbon does not include societal costs. I use avoided control costs, particularly the cost of carbon capture and storage (CCS). The assumption is that utilities would choose to invest in CCS rather than bear the higher (social) costs of carbon emissions. The table below shows how an average CCS cost is derived from both coal and natural gas generation CCS.

Avoided Cost of Carbon Equals Least Cost Option: CARBON CAPTURE ³		
CCS for Natural gas generator		
Low	\$87	per ton
High	\$188	per ton
Midpoint	\$138	per ton
Coal generator		
Low	\$58	per ton
High	\$170	per ton
Midpoint	\$114	per ton
NG + Coal average	\$126	per ton
Natural gas	52.91	kg per MMBtu
CCGT heat rate	10,000	Btu/kWh
CO2 emissions	0.529	kg per kWh

³ See Case No. 2023-00404, *Electronic Tariff Filings of Louisville Gas and Electric Company and Kentucky Utilities Company to Revise Purchase Rates for Small Capacity and Large Capacity Cogeneration and Power Production Qualifying Facilities and Net Metering Service-2 Credit Rates*, Direct Testimony of Andrew McDonald on Behalf of Joint Intervenors Kentucky Solar Energy Society and Mountain Association at 12, 17 (Feb. 29, 2024).

Average Avoided Cost of Carbon via CCS	\$0.06653	cents per kWh
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WITNESS: James Fine

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**Case No. 2025-00113 &
Case No. 2025-00114**

Question No. 1.9

Q-1.9 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.

A-1.9 RESPONSE:

Workpapers are being uploaded separately for the following Colton Tables: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15, 16.

Workpapers are being uploaded separately for the following Colton Figures: 1, 2, 3, 4, 5, 6.

Two Tables that do not have a “workpaper” attached (13 & 14) are tables that do not have an underlying “electronic file.” They are instead simply copies of data provided in Company documents through discovery (JI 1.92 and 1.29, respectively). Two additional Tables (#17 and #18) are copies of Tables that were provided by the Companies in the docket and at the place cited in the Table.

WITNESS: Roger Colton