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

RESPONSE OF KENTUCKY UTILITIES COMPANY TO THE LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT'S FIRST REQUEST FOR INFORMATION

DATED JULY 3, 2025

FILED: JULY 16, 2025

COMMONWEALTH OF KENTUCKY	
COUNTY OF JEFFERSON)

The undersigned, **Lonnie E. Bellar**, being duly sworn, deposes and says that he is Executive Vice President of Engineering, Construction and Generation for PPL Services Corporation and he provides services to Louisville Gas and Electric Company and Kentucky Utilities Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Lonnie E. Bellar

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 10th day of 2025.

Notary Public

Notary Public ID No. KYNP 63286

My Commission Expires:

COMMONWEALTH OF KENTUCKY)

COUNTY OF JEFFERSON

The undersigned, **John Bevington**, being duly sworn, deposes and says that he is Senior Director – Business and Economic Development for PPL Services Corporation

and he provides services to LG&E and KU Services Company, that he has personal

knowledge of the matters set forth in the responses for which he is identified as the

witness, and the answers contained therein are true and correct to the best of his

information, knowledge, and belief.

John Bevington

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 10th day of July 2025.

Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Robert M. Conroy**, being duly sworn, deposes and says that he is Vice President, State Regulation and Rates, for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Robert M. Conroy

Notary Public J Ely

Notary Public ID No. KYNP61560

My Commission Expires:

November 9, 2026



COMMONWEALTH OF KENTUCKY	
COUNTY OF JEFFERSON	

The undersigned, **Michael E. Hornung**, being duly sworn, deposes and says that he is Manager of Pricing/Tariffs for LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Michael E. Hornung

Subscribed and sworn to before me, a Notary Public in and before said County

and State, this 14th day of July

_2025.

Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

January 22, 2027

Business Use

STATE OF VERMONT)
)
COUNTY OF CHITTENDEN)

The undersigned, **Timothy S. Lyons**, being duly sworn, deposes and says that he is a Partner with ScottMadden Inc., that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Timothy S. Lyons

(seal)



COMMONWEALTH OF KENTU	CKY)

COUNTY OF JEFFERSON)

The undersigned, **Drew T. McCombs**, being duly sworn, deposes and says that he is Director - Regulatory Accounting for PPL Services Corporation and he provides services to Kentucky Utilities Company and Louisville Gas and Electric Company, that he has personal knowledge of the matters set forth in the responses, and that the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Drew T. McCombs

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 14th day of 2025.

Notary Public Llyg

Notary Public ID No. KYNP61560

My Commission Expires:





COMMONWEALTH OF KENTUCKY)

COUNTY OF JEFFERSON

The undersigned, **Elizabeth J. McFarland**, being duly sworn, deposes and says that she is Vice President, Transmission for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, that she has personal knowledge of the matters set forth in the responses for which she is

identified as the witness, and the answers contained therein are true and correct to the

best of her information, knowledge, and belief.

Elizabeth J. McFarland

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 10^{th} day of July 2025.

Notary Public

Notary Public ID No. <u>KYNP63286</u>

My Commission Expires:



COMMONWEALTH OF KENTUCKY	
COUNTY OF JEFFERSON	

The undersigned, **Heather D. Metts**, being duly sworn, deposes and says that she is Director – Financial Planning and Budgeting for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, that she has personal knowledge of the matters set forth in the responses for which she is identified as the witness, and the answers contained therein are true and correct to the best of her information, knowledge and belief.

Heather D. Metts

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Subscribed and sworn to before me, a Notary Public in and before said County and

State, this His day of July 2025.

Notary Public

Notary Public, ID No. KWP63286

My Commission Expires:

COMMONWEALTH OF KENTUCKY)

COUNTY OF JEFFERSON

The undersigned, **Shannon L. Montgomery**, being duly sworn, deposes and says she is the Vice President, Customer Services for Kentucky Utilities Company and

Louisville Gas and Electric Company and an employee of LG&E and KU Services

Company, that she has personal knowledge of the matters set forth in the responses for

which she is identified as the witness, and the answers contained therein are true and correct

to the best of her information, knowledge, and belief.

Shannon L. Montgomery

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 10^{th} day of July 2025.

Notary Public

Notary Public ID No. <u>KYNP63286</u>

My Commission Expires:

COMMONWEALTH OF KENTUCKY	
COUNTY OF JEFFERSON)

The undersigned, **Charles R. Schram**, being duly sworn, deposes and says that he is Vice President –Energy Supply and Analysis for Kentucky Utilities Company and Louisville Gas and Electric Company and is an employee of LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Charles R. Schram

Subscribed and sworn to before me, a Notary Public in and before said County and State this 10th day of 2025.

Notary Public

Notary Public ID No. KYNP63286

My Commission Expires:

Jamary 22, 2027



COMMONWEALTH OF PENNSYLVANIA)	
)	SS:
COUNTY OF CUMBERLAND)	

The undersigned, John J. Spanos, President, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests and that the answers contained there are true and correct to the best of his knowledge, information and belief.

Subscribed and sworn to before me by John J. Spanos on this 13 day of July, 2025.

Commonwealth of Pennsylvania - Notary Seal MEGAN LYNN ECKRICH - Notary Public **Cumberland County** Commission Expires September 16, 2027

Commission Number 1264513

My Commission Expires September 16, 2027

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Peter W. Waldrab**, being duly sworn, deposes and says that he is Vice President, Electric Distribution, for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

Peter W. Waldrab

Notary Public J. Elpy

Notary Public ID No. KYNP61560

My Commission Expires:

November 9, 2026

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 1

- Q-1. Refer to the testimony of Timothy S. Lyons at page 27. Please explain why the Companies' proposed base rates for the Rate LS class that were updated to reflect the alleged current cost of service while the proposed base rates for the Rate RLS class were updated to reflect a uniform increase in class revenues.
- A-1. The proposed rate for Rate LS is designed to recover the annual revenue requirement of new lighting installations to ensure new lighting installations reflect their cost of service. See Exhibit TSL-13 in Mr. Lyons Direct Testimony for derivation of the annual revenue requirement. Rate RLS is restricted to installations as of July 1, 2021, and thus new lighting installations are not eligible for Rate RLS.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 2

- Q-2. Refer to the testimony of Timothy S. Lyons. Please describe the way that load profiles were constructed for each of the KU and LG&E lighting rate schedules.
- A-2. The load profiles were based on KU and LG&E's hourly load forecast. See attachment "2025 1 KU Demand Data Redacted.xlsx" and "2025 8 LGE Demand Data.xlsx" to KU's and LG&E's response to PSC 1-54.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 3

- Q-3. Please explain why the rate for each lighting offering in Rate LS is not proposed to be increased by the same percentage.
- A-3. The proposed rate for Rate LS is designed to recover the annual revenue requirement of new lighting installations to ensure new lighting installations reflect their cost of service. See Exhibit TSL-13 in Mr. Lyons Direct Testimony for derivation of the annual revenue requirement.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 4

Responding Witness: Michael E. Hornung

- Q-4. Refer to TSL-13. Please explain how the Companies determined the kW per light.
- A-4. See the response to Question No. 11.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 5

Responding Witness: Michael E. Hornung

- Q-5. Refer to TSL-13. Please explain how the Companies determined the useful life.
- A-5. See the response to Question No. 13.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 6

Responding Witness: John J. Spanos

- Q-6. Refer to the testimony of John J Spanos, VII-232. There is a substantial deviation between the fitted (smooth) and original survivor curve for street lighting and signal systems, corresponding to a clear change in age-specific failure rate at about 45 years. Does witness Spanos or the Company have any explanation for the sharp decline in failure rates at older ages?
- A-6. Account 373.00, Street Lighting and Signal Systems, includes a variety of assets such as the lighting fixtures, arms, poles and luminaries. The accounts also include a variety of types of each of the asset units of property. The original curve represents the historical activity of all of these components for the period 1929 through 2024. There are multiple life characteristics of each of the components that need to be estimated with one survivor curve. The assets in the account that have lasted to age 45 and beyond are the poles primarily which have a longer life cycle than many other components such as the lighting. Therefore, when looking at the entire account the overall rate of retirement for assets that make it to age 45 will not be the same as the assets prior to 45. This is a common expectation for this account.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 7

- Q-7. Refer to TSL-13. Please explain how the Companies determined the Total Installed Cost.
- A-7. Total Installed Cost was based on estimated material and labor cost for each unit. See the attachment being provided in a separate file.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 8

- Q-8. Refer to TSL-13. Please explain how the Companies determined the Annual Non-Fixture Maintenance Cost.
- A-8. The Annual Non-Fixture Maintenance Cost was based on forecasted test year lighting repair costs divided by the number of lamps. See the attachment provided in response to Question No. 7.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 9

- Q-9. Does KU, LG&E, or its corporate affiliates receive any form of rebates or reimbursement from LED manufactures, distributors, or retailers? If so, how and where is that revenue booked?
- A-9. No.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 10

- Q-10. Does the Company track expenses for new installation separate from repairs and the type of repair be known (e.g. problem related to wiring, fixture, pole, etc.)? Why or why not?
- A-10. Yes. New installations are charged to a New Business Streetlighting Budget. Repairs are charged to a capital or O&M Repair/Replace Defective Streetlighting Budget. Expenses are tracked in this manner in order to distinguish new business work from repair work, capital work from O&M work, to aid in budgeting, and is a generally accepted good business practice.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 11

- Q-11. For the period after July 2020 to the present, please provide any Company internal and external business plans, presentations, marketing material, feasibility studies, lighting conversion financial analyses, customer economic studies, conversion financial models, and correspondence to senior leadership as created or prepared by or for the Company as it relates to street lighting. Bookmark the following documents in your response:
 - a. Technical specifications or metrics established by the Company that were used to select LED lighting types, such as lumen output, lumens-per-watt, warranty, L70, kelvin, etc.
 - b. Product data sheets for the new LED lighting offerings and LED equipment supply options.
- A-11. See attachment being provided in a separate file.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 12

Responding Witness: Michael E. Hornung

- Q-12. Identify the useful life for each type of fixture within the proposed Restricted Lighting Service tariff.
- A-12. The RLS rates are given a uniform increase amongst all its rate codes to meet its revenue requirement. This uniform increase prevents the RLS rates from being assigned a useful life for carrying charges. However, had the RLS rates been calculated at cost of service, the estimated useful life for each RLS fixture would have been 25 years.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 13

- Q-13. LED fixtures service lives typically range from 50,000 to 100,000, and may extend as high as 250,000 hours or 12.5, 25, or 62 years respectively. As such these extended life spans, should lead to projections of lower annual O&M costs as a component of rate construction. Yet the projected LED LS rates remain at, near, or even higher than the RLS they are replacing.
 - a. Is there a projected timeframe or LED saturation level where the Company expects these O&M levels to begin to go down to reflect the reduced O&M costs of LED fixtures?
 - b. If the Company does not believe increased deployment of LED fixtures will reduce the O&M costs for leased lighting please elaborate why?
 - c. Additionally, public entities have seen a drastic reduction in the cost of outdoor area lighting in the past several years, while efficiency continues to increase. Again, the current LED LS rate constructions appear not to reflect this significant downward trend in fixture costs. Please explain the Company's experience in LED fixture costs over the past several years?
- A-13. The Company uses an estimated useful life of 100,000 hours or 25 years (based on 4,000 burn hours per year). While some LED fixtures have a calculated or theoretical lumen maintenance (L70) of 250,000 hours, the other components of those fixtures are generally rated for no more than 100,000 hours and no vendor has offered a warranty for more than 10 years.
 - a. No. All O&M savings are built into the proposed LS rates and passed through to the customers.
 - b. LED fixtures will reduce costs to customers, primarily in the area of energy savings and overall cost of ownership. Most existing RLS fixtures have a comparable LED with a lower monthly rate. The cost built into the Company's proposed LED rates include capital installation costs, fixed carrying charge (rate of return, straight line depreciation, income taxes, property taxes), annual distribution energy at LE rate, and non-fixture O&M cost of \$2.50-KU per fixture per year. That non-fixture O&M cost

represents the Company's O&M expenses for repair efforts such as cable repairs (not cable replacement), fixing leaning poles, replacing globes/refractors/shields, etc. These O&M expenses are not expected to change as a result of LED deployment. The LED LS rates do not include the capital costs to replace the bulbs and photo controls of RLS fixtures, which represent the majority of lighting repairs and are generally thought to be an area of significant O&M savings for lighting customers and providers. Capital maintenance expenses are not expressly captured in the LS/RLS rate design, those expenses are captured through the carrying cost, specifically the depreciation schedule (which is based on the LED's expected useful life and essentially represents the typical replacement schedule). Furthermore, the Company's RLS rates do not represent the true cost of ownership for those fixtures due to downward pressure on those rates through historical rate case settlements. Additionally, the Company continues to see increases in labor costs for Line Technician resources who perform installation and maintenance of lighting assets, pushing LS LED rates higher.

c. KU and its customers have already realized most of the cost reductions attributable to increased LED fixture efficiency. LED efficiency is subject to the law of diminishing returns. Early on in LED manufacturing, LED efficiency saw massive, dramatic improvements. This meant that LED chips could be made smaller, put out more lumens, and more lumens per watt. This allowed manufacturers to reduce the size of the LED fixtures/housings, saving expenses on metals required for production. As LED technology became more ubiquitous, the LED chips/boards also became cheaper to produce and acquire. The gains from more efficient LEDs and smaller fixtures has started to level off over the past 5 years and as a direct result, LED fixture prices have also leveled off and the Company has started to see typical year-to-year increases seen in other materials and goods. See the table below for a comparison of rates and fixture prices from the proposed rates in the Company's 2018, 2020, and 2025 rate cases.

ΚU

	20	18	2020		2025	
Rate Code	Proposed Rate	Fixture Price	Proposed Rate	Fixture Price	Proposed Rate	Fixture Price
393	\$8.80	\$125.40	\$7.84	\$126.07	\$11.23	\$139.52
390	\$10.23	\$148.50	\$9.58	\$167.23	\$12.68	\$183.41
391	\$12.34	\$203.50	\$11.55	\$218.06	\$14.96	\$237.42
392	\$15.67	\$302.50	\$14.86	\$324.39	\$18.65	\$345.47
396	\$5.40	\$148.50	\$5.35	\$167.23	\$6.40	\$183.41
397	\$7.52	\$203.50	\$7.33	\$218.06	\$8.68	\$237.42
398	\$10.85	\$302.50	\$10.64	\$324.37	\$12.37	\$345.47
399	\$7.65	\$330.00	\$7.14	\$330.40	\$8.41	\$373.57

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 14

- Q-14. What is the percentage of street lights throughout the Company's system that is an LED light?
- A-14. As of June 30, 2025, 25% of outdoor lights provided by the Company to customers are LED lights.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 15

- Q-15. Does the Company have any systematic plans to convert restricted lighting to LED, such as geography or rate code?
- A-15. No. The Company will continue to provide fixtures and poles for non-LED lights as existing fixtures and poles need to be replaced but will do so only from the Company's existing inventory. When those inventory items are exhausted, a lighting customer whose non-LED fixture or pole needs to be replaced will need to convert to a new LED fixture, pole, or both under Rate LS. The Company has exhausted its inventory of Rate RLS fixtures in the Lexington area and all future replacements will be with a Rate LS LED fixture.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 16

Responding Witness: Peter W. Waldrab

- Q-16. In a prior rate case, the Company defined the end of service life for an LED fixture when the fixture fails completely or lumen output is reduced below 70% (L70) of initial output rating.
 - a. Does the Company still use the same definition for end of service life for an LED fixture?
 - b. What are the Company's plans for service/maintenance for LED lights when they near or reach the end of service?
 - c. When sourcing or purchasing LED fixtures, does the Company have a minimum allowable/acceptable L70 rating for fixtures in hours? If so, what is that rating?
 - d. Please provide the L70 rating for each LS LED fixture/rate code currently in use.

A-16.

- a. Yes. The Company defines end of service for an LED as when the fixture fails or when the lumens depreciate to 70% of their initial output (L70) and that depreciation becomes noticeable to the human eye
- b. LED fixtures will be replaced upon failure or when, after customer request or visual inspection, Company personnel determine the LED should be replaced because the lumen output has depreciated beyond a reasonable level.
- c. L70 is not a deciding factor in fixture selection because the Company expects other components of the LED fixture (e.g., transformer/driver or surge protectors) to fail prior to the LEDs reaching L70. Nonetheless, the Company expects all of the LED fixtures to have an L70 of at least 100,000 hours. Due to the integrated design of LED fixtures, failure of these other components requires replacement of the entire LED fixture.
- d. See attachment being provided in a separate file.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 17

- Q-17. Please refer to the Rate LS and RLS. Please provide an updated cross-reference table (excel) that associates all existing RLS rate codes with their LS LED equivalent(s). Please ensure the cross-reference table includes the RLS and LS cost, and if applicable for LS rates the pole category and charges.
- A-17. See attachment being provided in a separate file with the rates cross-reference. Rate charges are available on the LGE-KU website at https://lge-ku.com/regulatory/rates-and-tariffs.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 18

- Q-18. For each street lighting type within Rates LS and RLS, please identify the number of accounts on each type as of June 30 on each year since 2020 for all Kentucky jurisdictional operations.
- A-18. See attachment being provided in a separate file.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 19

Responding Witness: Peter W. Waldrab

- Q-19. Please identify the number of each type of lighting in Rate RLS each Company anticipates replacing for each year over the next 5 years for all Kentucky jurisdictional operations.
- A-19. The Company has no planned replacement program for street lights. The Company replaces street lights at the request of customers, or when dictated by failure, damage, or unsatisfactory physical condition.

The Company does not track replacements by lighting type. The Company replaced fixtures in the approximate amounts indicated below over the last three years, and would anticipate a similar amount over the next 5 years.

	2022	2023	2024
KU Jurisdictional	266	1052	1374
KU Entire System	279	1068	1385

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 20

- Q-20. For each type of street-lighting pole, please identify the number of accounts on each type as of June 30 on each year since 2020 for all Kentucky jurisdictional operations.
- A-20. See attachment being provided in a separate file.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 21

Responding Witness: Peter W. Waldrab

- Q-21. Please provide a breakdown for the following:
 - a. For each individual rate code in LS and RLS (i.e. LC2, LC4, 490, 470), how many fixtures and poles does LFUCG pay as of June 30, 2025, and in the base year?
 - b. Based off of those numbers, what would the projected annual cost per rate codes of LS and RLS be for LFUCG under the current tariffs? What would the annual cost be for LFUCG under the proposed tariffs in this rate filing?

A-21.

- a. See attachment being provided in a separate file.
- b. The Company has not performed the specific calculation for LFUCG. See Schedule M-2.3 at Tab 66 of the filing requirements for the proposed increase for each rate class.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 22

Responding Witness: Peter W. Waldrab

- Q-22. Please state how many new public street lights were installed by KU for each of the past three years, indicating the types of lights installed and the number of these lights which replaced previously existing street lights, for the following: Lexington-Fayette Urban County Government; KU's Kentucky jurisdictional operations; and KU's entire system.
- A-22. The Company has a long-standing practice of maintaining a database of all lighting related activities in Lexington-Fayette County. The Company does not replicate this practice anywhere else in the service territories. The Company does not have a business need to track information at this level for public street lights in KU jurisdictional operations or KU's entire system.

See attachment being provided in a separate file.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 23

Responding Witness: Peter W. Waldrab

- Q-23. For each of the past three years, please provide the number of street lights that KU had planned on replacing prior to that year, and a summary of the actual number replaced that year for the following: Lexington-Fayette Urban County Government (extrapolate if needed); KU's Kentucky jurisdictional operations; and KU's entire system.
- A-23. The Company has no planned replacement program for street lights. The Company replaces street lights at the request of customers, or when dictated by failure, damage, or unsatisfactory physical condition.

The Company does not track replacements by customers. The Company replaced fixtures in the approximate amounts indicated below over the last three years and would anticipate a similar amount over the next 5 years.

	2022	2023	2024
KU Jurisdictional	266	1052	1374
KU Entire System	279	1068	1385

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 24

Responding Witness: Michael E. Hornung / Peter W. Waldrab

- Q-24. Please explain how the Companies determined the One-Time Conversion Fee and the Monthly Conversion Fee if Customer requests to change current functioning non-LED fixture to an LED fixture.
- A-24. The Companies are not proposing to change the One-Time Conversion Fee and the Monthly Conversion Fee. The support for current conversion fee charges can be found on page 37 and Exhibit WSS-5 of Steve Seelye's direct testimony in the 2020 Rate Case.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 25

Responding Witness: Peter W. Waldrab

- Q-25. Please explain in detail KU's current policies, procedures, practices, and/or guidelines for maintaining street lights in Fayette County and provide copies of the same.
 - a. Does KU regularly inspect individual street lights or the collective street lighting in Fayette County?
 - b. Do these inspections take place only upon the receipt by KU of a complaint regarding a particular street light?
 - c. What is the average response time to replace a non-working street light in Fayette County?
 - d. Does this information differ depending upon the type of street light? If so, please provide a detailed explanation.
 - e. Would AMI deployment as proposed in the Company's application provide information to the Company that would improve any of the response times or costs related to lighting?
- A-25. The Company maintains its street lights and other lighting products consistent with the original Company installation standards, the Terms and Conditions of the Lighting Service and Restricted Lighting Service Schedules, and in compliance with 807 KAR 5:041. Electric: Section 2 General Requirements, Section 3 Acceptable Standards, and Section 5 Maintenance or Continuity of Service.
 - a. The Company conducts proactive lighting patrols as part of its normal operations. These night-time patrols are integrated into the Company's normally scheduled operations for outage response activities. When not responding to outages, the Company's outage technicians, who are on duty 24 hours a day, 7 days a week, undertake lighting patrol and maintenance activities, among other duties that they perform daily.

In addition to needed street light repairs reported by the public, LFUCG, and internally, proactive patrols and repairs on arterial roadways are

typically performed semi-annually to identify and repair those lights along the following routes:

Man-O-War Blvd – New Circle Road Versailles Road – Winchester Road Harrodsburg Road – Paris Pike Nicholasville Road – Newtown Pike Tates Creek Road – Georgetown Road Richmond Road – Leestown Road

b. The Company also issues repair orders in response to light outages reported by Company employees and contractors, customers, LFUCG personnel, police, fire departments, and the general public. Outages can be reported via:

1. Website: https://lge-ku.com/outages/report/streetlight

2. Residential Call Center: 1-800-981-0600

3. LexCall 311

LexCall is a process for the reporting of street light outages through LFUCG's 311 call in reporting system. Daily outages are emailed to the Company and then entered into a work management system from which a repair order is generated.

- c. KU has a long-standing practice of tracking lighting repair activity reported by LexCall 311 that is not replicated by the Company anywhere else in the service territories. In 2024, when repairs reported by LexCall 311 could be completed by component replacement (bulb and/or photovoltaic control replacement), the Company's average street light repair took 1.44 days.
- d. No.
- e. No. Lighting is typically unmetered and therefore is not expected to be impacted by the proposed AMI deployment.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 26

Responding Witness: Peter W. Waldrab

- Q-26. Please describe in detail all maintenance that must be performed by the Company on each type of street light to ensure that it operates properly and provide a list of each component of the required maintenance and its monthly cost.
- A-26. Normal maintenance consists of replacing the items listed in the attachment being provided in a separate file as needed. The current unit costs are for materials specific to each installation and do not include associated installation costs (labor, minor materials, equipment, etc.), which are not tracked at this level of detail. Maintenance is required when the Company has identified or received a report that the street light is inoperative. The most common maintenance performed on a street light is the replacement of a burned out bulb and/or replacement of an inoperative photoelectric control. Additional maintenance activities include fixture replacements, cable/conductor repair/replacements, pole replacements, and replacing mast arms.

See attachment being provided in a separate file.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 27

Responding Witness: Peter W. Waldrab

- Q-27. Please provide both the number and type of public street lights for LFUCG accounts for which service or maintenance was performed in each of the last three years and the same information for both KU's Kentucky jurisdictional operations and its entire system. In addition, please provide the basis for generating the above repair or maintenance order (i.e., referral from 311, customer complaint, KU) for each of the above.
- A-27. KU system-wide repair orders for street and other outdoor lights during the periods in question are in the table below. KU does not track repairs by type.

	2022	2023	2024
Lexington	3965	5917	5693
KU Jurisdictional	14273	17231	17323
KU Entire System	14806	17957	17985

KU does not track repairs by reporting source. Refer to the detailed response to Question No. 25 for the basis of KU's policies and practices regarding repairs and maintenance. Street light repairs that were referred by Lexcall 311 are shown in the table below.

				Thru June
	2022	2023	2024	30, 2025
LexCall Emails	848	1,143	1,379	874

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 28

Responding Witness: Peter W. Waldrab

- Q-28. Please provide the average time to repair a malfunctioning street light from the time of discovery, either by public reporting or Company representative, initiation of work order; to the time the light is restored to operation, work order is closed.
- A-28. For KU, the average time to respond to a street light outage report in 2024 was 1.82 days. In 2023, the average time to respond to a street light outage report was 1.75 days. Lights were restored to operation during this first run 92% of time in 2024 and 86% of the time in 2023.

For KU, the average time to repair (from discovery to the time the light is restored to operation) in 2024 was 2.05 days. In 2023, the average time to repair was 2.05 days.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 29

Responding Witness: Peter W. Waldrab

- Q-29. Please provide a chart of maintenance and repair calls for each street light for LFUCG and the total cost for each call, including both materials and labor.
- A-29. KU does not track repairs by customer. See attached for a chart of maintenance and repair calls by address for all of Fayette County, for 2022 through 2024. Systemwide, KU has approximately 16,033 streetlight repair work requests per year at an approximate average cost of \$432 per repair.

See attachment being provided in a separate file.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 30

- Q-30. Please provide separately the number of calls from the public regarding street lights paid for by LFUCG and the rest of the Company's system.
- A-30. The Company does not track the number of calls from the public regarding street lights paid for by LFUCG and the rest of the Company's system.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 31

Responding Witness: Peter W. Waldrab

- Q-31. Please provide any internal policies or procedures with regards to street light maintenance, repair and replacement.
- A-31. The procedure for street light maintenance, repair, and replacement consists of the following work practices:
 - A reported light outage will be investigated within 2 working days by a trouble shooter or service technician.
 - o Initial response is comprised of checking the bulb, photocell, voltage, and starter (if applicable).
 - Replacement of any of these failed components will be conducted at that time.
 - If it is identified that none of the above components are responsible for the lighting failure, the work will be transferred to the lighting repair work queue.
 - A second-level response to light outages involves further investigation into the cause of the voltage failure.
 - o Typical causes include:
 - Defective fixtures
 - Fuses
 - Third party damage (dig-ins or broken poles)
 - Failed conductors
 - Opending on the type of repair needed, repairs may be made at this time or scheduled for a later date. Boring or trenching a new feed would typically be done at later date to allow for UG line locates required by Ky Dig Law. The time frame for this repair will be heavily dependent on weather, customer or city property impacts, and/or soil dynamics

See also the response to Question No.25.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 32

- Q-32. Is KU able to ascertain, at any given time, the number of street lights paid for by LFUCG that are actually in proper working order? If so, please provide a detailed explanation, and further explain:
 - a. How many street lights (on average) are actually in proper working order at any given time;
 - b. Whether LFUCG is charged the monthly tariff rate for non-working street lights for the periods of time within which such street lights are non-operational or not working properly;
 - c. The amount of time it takes (on average) to bring such street lights into working order; and
 - d. Whether this information differs among different types of street lights. If so, please provide this information for each type of light.
- A-32. No, KU cannot ascertain the number of street lights that are paid for by LFUCG that are operable at any given time. However, as described in the response to Question No. 15(a), KU proactively identifies street light outages and relies upon customers to report service problems
 - a. All lights, unless reported otherwise, are considered to be in proper working order.
 - b. LFUCG pays a monthly tariff rate for all street lights it has requested and that rate schedule provides KU two business days to initiate a repair after notification by a customer.
 - c. See the response to Question No. 28.
 - d. See the response to Question No. 25d.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 33

- Q-33. Please state how many existing street lights are scheduled (or anticipated) to be replaced by the Company over the next five years for which LFUCG currently and/or in the future will pay a monthly rate. Please provide the quantity of each type of light being removed and the quantity and type of light that will replace it.
- A-33. The Company has no scheduled replacements of any current LFUCG street lighting fixtures. Street lights on the Restricted Lighting Service rate will be replaced at fixture failure with an equivalent LED, or at bulb failure once non-LED bulb supplies are exhausted. The Company cannot anticipate the rate at which RLS fixtures will fail and subsequently be replaced with an equivalent LED.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 34

- Q-34. Please estimate based on historical maintenance how many existing street lights are anticipated to be replaced by KU over the next five years within Fayette County. Please provide an anticipated breakdown by rate code based on historical failures and replacements.
- A-34. See the response to Question No. 23 for approximate fixture replacements for 2022, 2023, and 2024. Average annual fixture replacements for KU Jurisdictional is 897. The Company does not track replacements by rate code or by county, except for Fayette County. Based on historical maintenance the Company expects to replace approximately 897 fixtures with LED fixtures each year over the next 5 years.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 35

Responding Witness: Peter W. Waldrab

- Q-35. The Company often promotes technological advancements, including improved communication through web pages and mobile applications such as the LG&E KU ODP mobile app.
 - a. Is there a function on the Company's mobile app that enables a user to report and "Geo-Tag" inoperable or malfunctioning street lighting?
 - b. If not, does the Company plan to include this capability in any mobile application upgrades, specifically the ability to "Geo-Tag" or more precisely locate the street light?
 - c. Explain what, if any, improvements the Company has made to its website since the last rate case to report street light outages?

A-35.

- a. No.
- b. The Company is exploring the feasibility of adding functionality to their mobile app that would enable users to report street light outages by using a map to identify and select the streetlight in question.
- c. The Company has not made any changes to its website since the last rate case to report street light outages. The current "Report a Streetlight Outage" form that can be found here:

https://lge-ku.com/outages/report/streetlight

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 36

Responding Witness: Drew T. McCombs / Heather D. Metts / Peter W. Waldrab

- Q-36. Refer to KU Tab 62 Schedule I-2 for Public Street & Highway Lighting. The revenue for Public Street and Highway Lighting has decreased each of the most recent five calendar years.
 - a. Please explain why there has been a trend for decreasing revenue for Public Street and Highway Lighting over this 5-year period.
 - b. Given the decreasing trend over the last 5 years (which actually dates back to 2017 based on prior filings), please explain why the Company expects an increase in revenues from the base year to the test year.

A-36.

- a. Lighting contracts that are solely related to the Public Street and Highway Lighting revenue class have seen a decrease over the past 5 years. All lighting contracts, including those that are included in other revenue classes, have maintained consistent annual revenues over the past 5 years.
- b. The increase from the base year to the test year is driven primarily by a difference in how actual revenues are recorded by revenue class in the first six months of the base year and how they are forecasted by revenue class in the last six months of the base year and twelve months in the test year. There is no impact to rates as a result of this difference in allocation between revenue classes because rates are designed at the tariff level and not the revenue class level.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 37

Responding Witness: Drew T. McCombs / Heather D. Metts / Shannon L. Montgomery / Peter W. Waldrab

- Q-37. Please refer to Public Street & Highway Lighting, KU Tab 62 Schedule I-2.
 - a. How much of the base-year revenue is associated with LFUCG accounts?
 - b. How many of the base-year customers are LFUCG?
 - c. Why does the number of customers decrease to from 908 in the base year to 294 in the test year?

A-37.

- a. LFUCG accounts represented 72.9% of the Public Street & Highway Lighting revenue for the first six months of the base period. The last six months of the base period are based on budgeted street light data, which is not split out by customer.
- b. As of July 4, 2025, LFUCG accounted for 272 of the Public Street and Highway Lighting customers.
- c. The decrease in the number of customers in the test year is due to a difference in how customer counts are obtained for actual and forecasted periods. Specifically, customer counts are not forecasted for tariffs that do not have a customer charge and forecasted allocations to get revenue from a tariff level to a revenue class level do not always match with how actuals are recorded. There is no impact to rates as a result of these differences.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 38

- Q-38. Would the Company recognize cost savings if a customer committed to converting large numbers of traditional street lighting to LED street lighting?
- A-38. No. Any costs savings are embedded in the LS LED rates and passed through to the customer.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 39

Responding Witness: Michael E. Hornung / Shannon L. Montgomery

- Q-39. Under how many different types of customer rate codes does the LFUCG currently make payments to KU? For each type of class, please provide the following information:
 - a. The type of customer rate code;
 - b. The number of LFUCG accounts in each such rate code;
 - c. The total amount paid by the LFUCG for each such rate code during the last 12 month period; and
 - d. The total net projected impact for each such rate code under the proposed rate increase.
- A-39. There are three account classes associated with LFUCG's accounts and rate codes: commercial, public authorities, and residential.
 - a. See attachment being provided in a separate file.
 - b. See attachment being provided in a separate file.
 - c. See attachment being provided in a separate file.
 - d. The Company has not performed the specific calculation for each of the LFUCG accounts. See Schedule M-2.3 at Tab 66 of the filing requirements for the proposed increase for each rate class.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 40

Responding Witness: Shannon L. Montgomery

- Q-40. Please provide a schedule showing the following information for each current LFUCG account for 2023, for 2024 and the first 6 months of 2025 separately by year and not added together.
 - a. Applicable tariff.
 - b. Other tariffs that could be applicable to this account.
 - c. Total sum paid.

A-40.

- a. See attachment being provided in a separate file. The information requested is confidential and proprietary and is being provided under seal pursuant to a petition for confidential protection.
- b. All customer accounts are currently on their correct rate. Accounts on a General Service rate may be eligible for General Time-of-Day Energy or Time-of-Day Demand rates. Accounts on a Residential Service rate may be eligible for Residential Time-of-Day Energy or Time-of-Day Demand rates.
- c. See the response to part (a).

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 41

Responding Witness: Drew T. McCombs

- Q-41. Does KU have an estimate or general or specific information on how much revenue is derived from Fayette County customers? If so, please provide by customer class for each of the last three years as well as a comparison of the percentage of revenue that this constitutes in relation to all revenues.
- A-41. See attachment being provided in a separate file.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 42

Responding Witness: Timothy S. Lyons

- Q-42. Did the cost of service study prepared for this case include any categories of costs used to determine customer charge which were not included in the cost-of-service study prepared by the Company's witness in the 2020 rate case? If the answer is yes, please list the nature of the costs and the amount.
- A-42. The categories of costs classified as customer in the current class cost of service study were consistent with those classified as customer in the 2020 rate case. Costs classified as customer were used to support the proposed customer charges.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 43

Responding Witness: Timothy S. Lyons

- Q-43. Were there any changes in the methodology in the Company's cost of service study in this case from the 2020 cost of service study? If the answer is yes, please describe the changes.
- A-43. The methodology used to functionalize, classify, and allocate costs in the cost-of-service study filed in the current base rate case proceeding is generally consistent with the methodology filed in the prior base rate case proceeding in Case No. 2020-00349.

There are two major exceptions. First, is the allocation of production fixed costs. Production fixed costs were allocated to each rate class in the current base rate case proceeding based on the 6-CP method. Production fixed costs were allocated to each rate class in the prior base rate case proceeding based on the Loss of Load Probability (LOLP).

Second, the transmission plant and related costs were allocated in the current base rate case proceeding based on the 6-CP method. Transmission costs were allocated to each rate class in the prior base rate case proceeding based on non-coincident peak (NCP) demands at transmission voltage.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 44

Responding Witness: Peter W. Waldrab

- Q-44. Please provide a copy of every vegetation management plan employed by LGE/KU during the last 5 years for:
 - a. distribution lines; and
 - b. transmission lines.

A-44.

- a. See attachment being provided in a separate file.
- b. See attachment being provided in a separate file.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 45

- Q-45. Please provide a listing by type of trees and number of same removed from transmission lines in Fayette County during this five year cycle.
- A-45. The company does not track type (species) or the number of trees removed.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 46

- Q-46. By the categories of high voltage and low voltage transmission lines, please provide how many trees and corridor miles have been cleared and how many remain to be cleared under the current five year plan.
- A-46. Beginning in 2022 through June 30th of 2025, the company has completed 2,908 miles with 1,545 miles remaining. The company does not track individual tree removals.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 47

Responding Witness: Charles R. Schram

- Q-47. Refer to the testimony of Charles R. Schram, especially at pages 9 through 11. Please provide the modeling referenced on page 10, line 2.
- A-47. For solar models and outputs from those models, see Exhibit CRS-7 at Load_Forecasting\Electric_Load_Forecast\Electric\Forecasts\PV\model and output.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 48

Responding Witness: Charles R. Schram

- Q-48. Refer to the testimony of Peter W. Waldrab, pages 37:6 through 41:23. Please provide 2024 hourly average per customer residential load profiles for each of the Companies. Also, please provide 2024 hourly average per customer load profiles for residential customers participating in the Companies' net metering programs.
- A-48. For the 2024 hourly average per customer residential load profiles, see the response to KYSEIA 1-17. The Company has not created load profiles for residential net metering customers, which would require significant original work.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 49

Responding Witness: Peter W. Waldrab

- Q-49. Refer to the testimony of Peter W. Waldrab, at pages 37:6 through 41:23. Please provide the Companies' line transformer sizing practices, including the types and sizes stocked, the methods or tables used to calculate transformer rating to be installed.
- A-49. When sizing equipment for new or additional load, it is the Company's policy generally to size pole mount or padmount transformers so that the expected peak load does not exceed the base rating of the transformer. However, transformers can tolerate loading over base rating at varying amounts, depending on type and size. Pole mount transformers can be loaded to 36% to 80% (depending on size) over base rating in summer or 58% to 100% in winter before requiring changeout. Single phase padmount transformers can be loaded to 43% to 90% over base rating in summer or 59% to 110% in winter before requiring changeout. Three phase padmount transformers can be loaded to 45% to 67% over base rating in summer or 60% to 84% in winter before requiring changeout. These changeout guidelines are spelled out in LG&E/KU Electric Standards page 20.00.04.

See attachment being provided in a separate file.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 50

Responding Witness: Michael E. Hornung

- Q-50. Please refer to the proposed changes to NMS-2.
 - a. Please confirm that the Company proposes to decrease the buy-back rate for solar.
 - b. Please confirm that, if the Company's proposed changes to NMS-2 are approved by the Commission, existing customers who made investment decisions on solar generating facilities with a 20-year or greater service life will be impacted based on the proposed changes.

A-50.

- a. Confirmed.
- b. The Company does not possess information regarding customers' investment evaluations.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 51

Responding Witness: Robert M. Conroy

- Q-51. Please confirm that KRS 278.466 does not require a utility to cap the cumulative generating capacity of net metering systems reaches one percent (1%) of a utility's single hour peak load during a calendar year.
- A-51. KRS 278.466(1) allows, but does not require, a utility to implement a 1% cap on net metering capacity:

If the cumulative generating capacity of net metering systems reaches one percent (1%) of a supplier's single hour peak load during a calendar year, the supplier shall have no further obligation to offer net metering to any new customer-generator at any subsequent time.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 52

Responding Witness: Robert M. Conroy

- Q-52. Please explain why the Companies to cap the cumulative generating capacity of net metering systems reaches one percent (1%) of a supplier's single hour peak load during a calendar year.
- A-52. The rates, terms, and conditions of Rider SQF (Small Capacity Cogeneration Qualifying Facilities) are appropriate for compensating distributed generation customers with generating facility capacities of 100 kW or less, and they are consistent with providing all customers service at the lowest reasonable cost. Therefore, the Company currently anticipates ceasing to offer service under Rider NMS-2 to any new customer-generator after (1) the cumulative generating capacity of NMS-1 and NMS-2 customer-generators reaches a combined 1% of the Company's single-hour peak load during a calendar year and (2) the Company receives Commission approval to cease offering such service.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 53

Responding Witness: John Bevington / Michael E. Hornung / Shannon L. Montgomery

Q-53. Refer to Rider SSP.

- a. Please confirm that the Company proposed to make Rate RTS and Rate EHLF eligible for the Solar Share Program Rider.
- b. Please state whether the Company has had any discussions with customers or potential Rate RTS and Rate EHLF customers on whether the customers would elect to participate in the Solar Share Program Rider. If yes, please describe and submit any written communications regarding this issue.

A-53.

- a. Confirmed.
- b. The Companies conduct annual reviews with existing RTS customers, during which the Solar Share Program may be discussed in connection to accounts the customer holds with the Companies. However, no RTS or potential EHLF customers have expressed interest in opting into Rider SSP to date. However, detailed information about the Solar Share Program is publicly available on the Companies' website (e.g., https://lge-ku.com/environment/solar, https://lge-ku.com/business-renewable-options). The Companies are open to engaging with any eligible customers interested in participating in the program.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 54

Responding Witness: Elizabeth J. McFarland

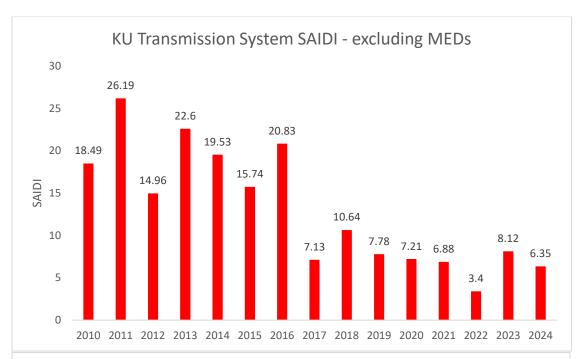
- Q-54. Refer to the testimony of John Crocket at pages 6 and 7, regarding LG&E and KU's transmission SAIDI and SAIFI metrics.
 - a. For both metrics, the Companies experienced significant improvement in reliability in their transmission system from 2017 forward. Please describe what measures were implemented to achieve these reductions in transmission outages in terms of duration and frequency.
 - b. Please provide the annual capital and O&M transmission costs since 2016 for each company.
 - c. Please provide the same information as contained in these two charts broken out for LG&E and KU separately.
 - d. Please provide the Companies' SAIDI and SAIFI, both on a combined system basis and on a separate company basis, as compared to the industry's average, top quartile and top decile.

A-54.

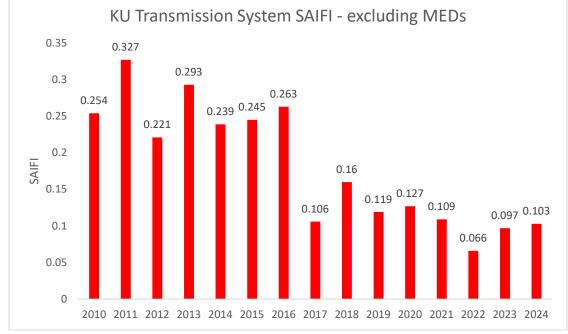
a. As stated in McFarland's testimony on page 8, the Companies have invested \$118.3 million in reliability improvements and \$601.3 million in resiliency improvements to the transmission system, representing both O&M and capital investments as part of the Transmission System Improvement Plan initiated in 2017. These capital investments included replacing outdated substation and line equipment with newer, more resilient components, that produce long-lasting hardening benefits to the transmission system. The assets in that replacement plan included wood poles, underground lines, circuit breakers, insulators, and line arresters at substations. While not all were part of TSIP, the Companies have replaced approximately 10,000 poles on the transmission system with steel poles since 2017. These steel poles are structurally stronger than wood poles, capable of withstanding winds up to 100 miles per hour and ice accumulation up to 1 inch, making them more resilient to hazards and extreme weather events. Steel poles have a longer expected life than wood poles, and do not deteriorate like wood

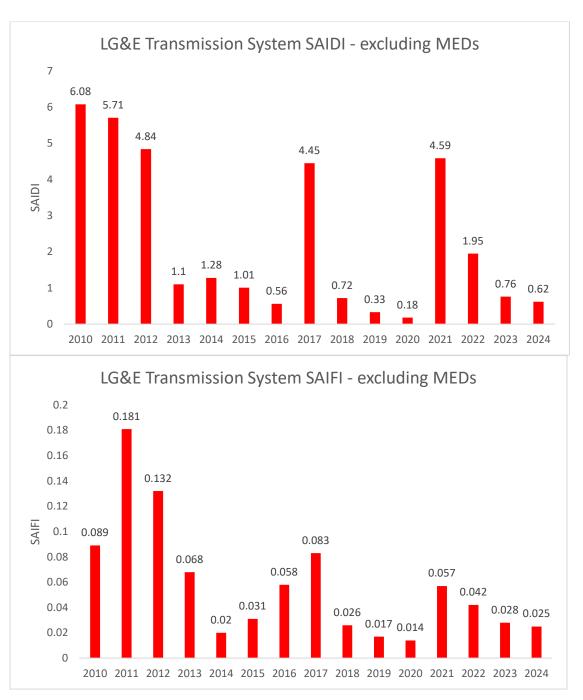
poles. These upgrades have significantly reduced the frequency and duration of outages. The Companies have also invested in motor-operated switches with automatic remote sectionalizing which minimize customer exposure to outages and reduce their duration. Additionally, a major component of the O&M investment was the adoption of a cycle-based vegetation management plan to ensure proper clearance around transmission lines thus significantly reducing tree-related outages.

b. See attachment being provided in a separate file.



c.





d. See attachment being provided in a separate file. The information requested is confidential and is being provided pursuant to petition for confidential protection.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 55

Responding Witness:

Q-55. This item is intentionally omitted.

A-55.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 56

Responding Witness: Lonnie E. Bellar

- Q-56. Refer to the testimony of Lonnie Bellar at page 4, regarding RIIR.
 - a. Please confirm that the 2024 RIIR of 1.57 reflects the combined operations of LG&E electric, LG&E gas, and KU electric.
 - b. Please provide the RIIR for KU's operations for the years 2016 through 2024.
 - c. Please provide the RIIR target rate for KU's operations for 2024.

A-56.

a. The 2024 RIIR of 1.57 reflects the combined operations of LG&E electric, LG&E gas, LG&E generation, KU electric, and KU generation.

	RIIR
2016	1.20
2017	1.11
2018	2.06
2019	1.98
2020	2.68
2021	1.88
2022	2.16
2023	1.86
2024	1.94

b.

c. The RIIR target for 2024 was established for LG&E and KU as a total company and was 0.74 (individual lines of business did not have separate targets).

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 57

Responding Witness: Lonnie E. Bellar

- Q-57. Refer to the testimony of Lonnie Bellar at pages 6 through 8, regarding the current status of the four projects approved in Case No. 20222-00402. Please provide an update of the EPC selection for the Mercer County and Marion County Solar projects.
- A-57. The EPC Agreement for the Mercer County Solar project was executed on June 13, 2025, with Depcom Power. An EPC contractor has not been selected for the Marion County Solar project.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 58

Responding Witness: Elizabeth J. McFarland

- Q-58. Refer to the testimony of Elizabeth McFarland at page 8, regarding replacement of wooden transmission poles with steel poles.
 - a. Please provide the percentage of transmission poles that are steel and those that are wooden.
 - b. Please state whether KU plans on converting additional or all its wooden transmission poles to steel. If so, provide details of that replacement plan.

A-58.

a. Please see the table below. Non-wood poles are comprised of steel poles, steel towers and concrete poles.

	KU	
Wood Poles	48%	
Non-Wood Poles	52%	
Wood Poles	17,294	
Non-Wood Poles	18,611	
Total	35,905	

b. KU's current standard is to utilize steel structures for all new installations. KU will systematically replace all wood with steel poles via prioritized proactive replacement projects. These projects consist of complete line rebuilds, reconductoring and defective pole replacement projects. Also, when emergency replacements are required, wood poles are replaced with steel.

Response to Lexington-Fayette Urban County Government's First Request for Information Dated July 3, 2025

Case No. 2025-00113

Question No. 59

Responding Witness: Elizabeth J. McFarland

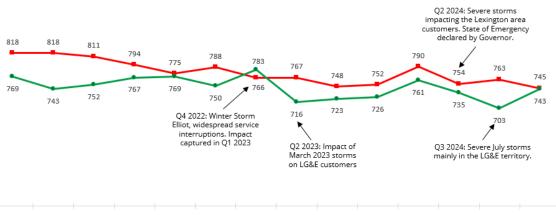
- Q-59. Refer to the testimony of Elizabeth McFarland at page 8, regarding the need to continue improving the transmission system in order to "keep pace with customer expectations for safe and reliable power." Please explain what is meant by the reference to "customer expectations for safe and reliable power" and whether KU and LG&E have conducted any studies or performed any surveys to effectively characterize and measure its customers' expectations for safe and reliable electric service.
- A-59. "Customer expectations for safe and reliable power" refers to the increasing demand for consistent and high-quality electricity service. This expectation has grown due to several factors, including the widespread use of technology, the anticipated growth of artificial intelligence powered by data centers, the expansion of electric vehicle use, and the increase in remote work, particularly following the COVID-19 pandemic. Reliable power is essential not only for personal comfort but also for maintaining livelihoods.

The Companies utilize quarterly JD Power surveys to measure and gain insight into customer expectations. These surveys consistently indicate that reliability and power quality are crucial to customer satisfaction. Reliable power delivery minimizes disruptions, protects customer equipment, supports critical operations, and builds trust between customers and utilities. The JD Power Quality and Reliability customer satisfaction index from the Electric Residential survey, as shown in the figure below, highlights a strong correlation between customer dissatisfaction and extreme events, underscoring the importance of providing reliable and high-quality power service. Higher scores on this index reflect greater customer satisfaction.

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Power Quality & Reliability Index

PQ&R Index - KU →PQ&R Index - LG&E



 $\texttt{Q3 2021} \ \ \texttt{Q4 2021} \ \ \texttt{Q1 2022} \ \ \texttt{Q2 2022} \ \ \texttt{Q3 2022} \ \ \texttt{Q4 2022} \ \ \texttt{Q1 2023} \ \ \texttt{Q2 2023} \ \ \texttt{Q3 2023} \ \ \texttt{Q4 2023} \ \ \texttt{Q1 2024} \ \ \texttt{Q2 2024} \ \ \texttt{Q2 2024} \ \ \texttt{Q3 2024} \ \ \texttt{Q4 2025}$