

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

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

**RESPONSE OF**  
**KENTUCKY UTILITIES COMPANY**  
**TO**  
**LEXINGTON-FAYETTE URBAN COUNTY**  
**GOVERNMENT'S SECOND REQUEST FOR INFORMATION**  
**DATED FEBRUARY 5, 2021**

**FILED: FEBRUARY 19, 2021**





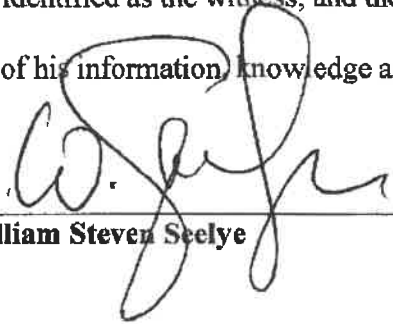




VERIFICATION

STATE OF NORTH CAROLINA )  
 )  
COUNTY OF BUNCOMBE )

The undersigned, **William Steven Seelye**, being duly sworn, deposes and states that he is a Principal of The Prime Group, LLC, and 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.

  
\_\_\_\_\_  
**William Steven Seelye**

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 17<sup>th</sup> day of February 2021.

Kyle Mello  
NOTARY PUBLIC  
BUNCOMBE COUNTY, NC  
MY COMMISSION EXPIRES 7/29/2023

  
\_\_\_\_\_  
Notary Public (SEAL)

Notary Public ID No. 101821300096

My Commission Expires:  
7/29/2023



**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
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Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 1**

**Responding Witness: William Steven Seelye**

Q-1. Refer to Response to LFUCG 1-1. See Chart provided as answer to LFUCG 1-1(a) and 1-1(d) and PSC 2-118(a), line 42, "material burden," which shows a 123% mark up for material on each column.

- (a) What is basis for this "material burden"?
- (b) What is basis for the amount of the "material burden" being 123% of material cost?
- (c) Is there a true-up mechanism to determine the true value of the material and give credit, or additional cost, when actual expenses are known?

A-1.

- (a) Material burden includes overhead expenses related to stores expense, local engineering-distribution, and general and administrative expenses associated with material that is purchased/warehoused.
- (b) The burden rate is not 123%. The amount of the burden is 23.21%. It is shown in the spreadsheet as 123.21% to simplify the calculation so the material cost and the burden (overhead cost) is included in the product once it is multiplied by the burden rate. The burden rate is based on forecasted cost for stores expense, local engineering-distribution, and general and administrative expenses.
- (c) There is no true-up mechanism for the burden amount included in base rates. It is not a normal utility practice to incorporate over-under cost recovery mechanisms (true-up mechanisms) for base rates.



**KENTUCKY UTILITIES COMPANY**

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**Question No. 2**

**Responding Witness: William Steven Seelye**

Q-2. Refer to Response to LFUCG 1-1. See Chart provided as answer to LFUCG DR 1-1(a) and 1-1(d) and PSC 2-118(a), line 50, "labor burden," which shows a 111% mark up for labor on each column.

- (a) What is basis for this "labor burden"?
- (b) What is basis for the amount of the "labor burden" being 111% of labor cost?
- (c) Is there a true-up mechanism to determine the true value of the labor and give credit, or additional cost, when actual expenses are known?

A-2.

- (a) Labor burden includes overhead expenses related to local engineering-distribution and general and administrative expenses associated with labor that is used to install facilities.
- (b) The burden rate is not 111%. The amount of the burden is 111.21%. It is shown in the spreadsheet as 111.21% to simplify the calculation so the labor cost and the burden (overhead cost) is included in the product once it is multiplied by the burden rate. The burden rate is based on forecasted cost for local engineering-distribution and general and administrative expenses.
- (c) There is no true-up mechanism for the burden amount included in base rates. It is not a normal utility practice to incorporate over-under cost recovery mechanisms (true-up mechanisms) for base rates.

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**Question No. 3**

**Responding Witness: William Steven Seelye**

- Q-3. Please provide in native (Excel) format the Attachment to Response to LFUCG 1-2(c).
- A-3. See attachment being provided in Excel format.

The attachment is  
being provided in a  
separate file in Excel  
format.

**KENTUCKY UTILITIES COMPANY**

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**Question No. 4**

**Responding Witness: William Steven Seelye**

- Q-4. Please refer to Response to LFUCG 1-2(c) and (d).
- (a) Would NBV of fixture decrease over time until it is either replaced, either by failure or conversion?
  - (b) What is NBV of fixtures as of January 1, 2018, 2019, 2020, and 2021?
  - (c) Why shouldn't one-time conversion fee be tied to each years' NBV, thus ratcheting down with depreciation?
- A-4.
- (a) Yes, the NBV of fixtures should decrease over time until they are fully replaced.
  - (b) The NBV per fixture as of May 2020 was \$197.16 and was used in this proceeding. The NBV of fixtures as of December 2017 was \$237.56 and was used in the prior rate case proceeding. The Company has not performed the calculations for the other years requested due to the original work required and the data only being needed for purposes of a rate case proceeding.
  - (c) Calculating the conversion fee annually for each conversion would be administratively burdensome and would likely not result in significant annual changes to the fees paid by customers.

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**Question No. 5**

**Responding Witness: William Steven Seelye**

- Q-5. Refer to the Attachment to Response to LFUCG 1-2(c).
- (a) What is the cost of LED installations included in the "New Business" section for 2017, 2018 and 2019?
  - (b) What is the cost of LEDs included for each year shown in the "Repair/replace Def Street Lighting" section?
  - (c) Reference the section titled "Calculated Present Day NBV".
    - i) What is the source of the NBV figures shown for OH Fix, UF Fix, and Poles?
    - ii) Why is "Total NBV" of \$172,252,908 different from "Net Cost Rate Base" for Distribution Street & Customer Lighting (Outdoor Lighting LS & RLS) of \$83,606,234 as shown on Exhibit WSS-31, page 6/36?
- A-5.
- (a) KU does not track its new business lighting installations by light type; therefore, it has not performed these calculations.
  - (b) KU does not track the repair and replacement of street lighting by light type; therefore, it has not performed these calculations.
  - (c)
    - i) The NBV figures shown for OH Fix, UG Fix, and Poles are calculated based on the average current cost per fixture or pole multiplied by the number of fixtures or poles in each category.
    - ii) The "Total NBV" of \$172,252,908 is a calculated number based on current costs. It is used to allocate the actual book value, used in the calculation of the conversion fee, between poles and fixtures. The \$83,606,234 shown in Exhibit-31, page 6 of 36 is a rate base number and will not correspond to

either the calculated “Total NBV” at current costs or the actual NBV for a particular year. NBV and rate base are not the same thing.

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**Question No. 6**

**Responding Witness: William Steven Seelye**

Q-6. Please refer to Response to LFUCG 1-2(g) and Exhibit WSS-5. Of the \$197.16 proposed one-time conversion fee, in dollars and cents, what amount is salvage and what amount is revenue?

A-6. All of the \$197.16 would be salvage.

**KENTUCKY UTILITIES COMPANY**

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**Question No. 7**

**Responding Witness: John K. Wolfe**

Q-7. Refer to the Response to LFUCG 1-5.

- (a) Why do reactive conversions require a one-man crew but proactive conversions require a two-man crew?
- (b) Please refer to Witness Wolfe's "Labor Cost Detail" spreadsheet (page 71 of 89).
  - i) Please describe what is included in "Total Labor Costs." Specifically, does Total Labor Cost include:
    - (1) Any labor time spent not at the worksite, for example in planning and preparation or in transit to each work site?
    - (2) Any indirect or overhead labor charges, for example labor costs of staff who prepare and represent project proposals to customers, engineering and design staff, staff who record lighting changes to assure correct billing, or corporate staff whose time is charged by allocation?
  - ii) How was the "Unit Rate per Light", shown in the 'Maintenance Conversion Comparison' section, determined?
- (c) In Witness Wolfe's attached e-mail from Bradley Hayes including spreadsheet, Mr. Hayes finds that a 6-year LED conversion timeline would have greater NPV than KU's current approach to conversions with a 25-year timeline (page 75 of 89). Why is KU not proposing to implement the 6-year conversion methodology analyzed by Mr. Hayes?
- (d) Please confirm that the 6-year conversion timeline analyzed by Mr. Hayes would not require customer conversion payments.

A-7.



- (a) Reactive conversion requires one person in a bucket truck traveling to a specific location to repair a single light following the procedures described in the response to LFUCG 1-21. Bucket trucks have limited capacity for hauling large LED fixtures. A proactive conversion requires a second person to drive a follow pick-up truck to transport fixtures so that many fixtures can be replaced in succession without the need to return to the storeroom. The second person helps reduce setup and teardown time between fixture replacements and aides in traffic control. The pick-up truck also carries an arrow board for traffic control.
  
- (b)
  - i. Total labor costs include the two-person crew's full 8 or 10-hour workday. That includes loading trucks, jobsite safety briefings, transit. setup, teardown, and fixture replacements.
    - 1. These costs do not directly include any planning or administrative costs, but do include transit costs to and from the worksite.
    - 2. These costs include the labor burden applied to all contractor labor. These costs do not directly include the costs of staff who work to prepare project proposals to customers, engineering and design staff, staff who record lighting changes to assure correct billing, or corporate staff.
  - ii. The unit rate per light is the unitized rate from the contractor that typically performs lighting maintenance work in the Lexington area.
  
- c. The analysis makes a number of assumptions that set up an ideal environment for both plans and evaluates the initial capital investment over 50 years. These assumptions include perfect recovery by the Company, consistent cost of capital, does not include replacements of failed LED fixtures and does not consider the stranded asset costs incurred for removing ~270,000 fixtures in good working order from service. In light of the Company's goal to make this base rate case the last base rate case it will file for a number of years (as explained on page 3 of Kent W. Blake's Direct Testimony), the initial capital outlay of ~\$118 million over 6 years necessary for this plan does not represent a feasible investment at this time.
  
- d. No customer conversion payments were considered in this analysis.

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**Question No. 8**

**Responding Witness: John K. Wolfe**

Q-8. Please refer to Response to LFUCG 1-5.

- (a) The question requested "technical specification or metrics established by the Company." The materials provided by witness Wolfe are manufacturer specs, not established by the Company. Please either:
  - i) verify that the Company did not establish its own technical specification or metrics to select LED types, or
  - ii) provide any technical specifications or metrics established by the Company.
- (b) Please describe procurement processes the Company uses to source luminaires. Provide any RFPs, evaluation rubrics and actual vendor/product evaluations developed for and used in those processes since 2017.

A-8.

- (a) The Company does not have its own internally developed technical specifications or metrics to select LEDs.
- (b) The Company periodically evaluates products from different lighting manufacturers to select LEDs. As part of these evaluations, the Company assesses the reliability, lumen output, surge protection, cost, energy usage, warranties and compliance with various ANSI standards (C136.2, C136.31, C136.10, etc.). During these evaluations, lighting personnel, field users, and electric standard engineers have the opportunity to review and demo the product lines. The Company seeks product reviews from other utilities and participates in multiple industry groups that help the Company assess lighting products. The Company evaluates each product as a whole and does not have any evaluation rubrics nor has it developed product evaluations for use in that process.

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**Question No. 9**

**Responding Witness: John K. Wolfe**

Q-9. Please refer to Response to LFUCG 1-5, and specifically "LED OUTDOOR LIGHTING CONVERSION PROJECT" page 70 of 89 of attachment.

- (a) Why are labor costs higher for LG&E than KU?
- (b) Why is there traffic control in proactive conversion and not failed fixture replacement?
- (c) Are the labor costs listed on this page still accurate for the conversions requested in this rate case? If not, what are those costs?
- (d) Please break down the \$112.36, or actual, labor cost for proactive conversion.
- (e) What is total cost, including labor, for proactive conversion?
- (f) Please break down the \$94.33, or actual, labor cost for failed fixture replacement.
- (g) What is total cost, including labor, for failed fixture replacement?
- (h) Have the benefits of proactive conversion over failed fixture replacement, such as ability to plan, order material, less travel, been considered in these costs?
- (i) If someone requested many proactive conversions, could the costs of labor be lowered through economies of scale?

A-9.

- (a) In respect to the LED Outdoor Lighting Conversion Project, the contractor used for the project in the LG&E Market had a slightly higher hourly rate. The LG&E contractor also experienced more delays due to parked cars along roadways during workdays. LG&E experiences a slightly higher burden rate on outside labor.

- (b) In most situations, a one-off light repair (replacing bulb or fixture) does not require traffic control, as the work does not impede traffic or the work is performed after normal business hours. In rare situations where drivers may not be able to see the repair truck, such as on a hill or curve, traffic control is utilized.
- (c) The Company is not requesting any conversions in this rate case. The labor costs built into the Lighting Service rates are accurate for this case.
- (d) Please see response to 7(b). This figure is the actual time and expense the contractor incurred to perform the proactive LED conversion.
- (e) Using the average labor costs incurred during the Proactive Conversion Project, a system-wide conversion of all KU lights to LED is estimated at \$68.6 million.
- (f) This is the average per unit rate (in this instance, per fixture replaced) for fixture replacements for the contractor that typically performs this work in the Lexington area.
- (g) Using the unit rates for the contractor that typically performs lighting maintenance work in the Lexington area, a system-wide conversion of KU lights to LEDs upon fixture failure is estimated at \$70.3 million.
- (h) Yes, the Company believes those benefits are represented by using the costs from the Proactive Conversion Project.
- (i) Based on the LED Outdoor Lighting Proactive Conversion Project, at this time, the Company does not believe lower costs could be achieved through economies of scale.

**KENTUCKY UTILITIES COMPANY**

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**Question No. 10**

**Responding Witness: John K. Wolfe**

- Q-10. Please refer to Response to LFUCG 1-13, which states "KU has a long-standing practice of maintaining a database of all lighting related activities in Lexington-Fayette County. KU and LG&E do not replicate this practice anywhere else in the service territories. KU 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." Please explain how KU is able to prepare accurate customer invoices if it does not track the types of lights installed and the number of these lights in KU jurisdictional operations or KU's entire system.
- A-10. When each work order is completed comments are entered that provide the necessary instructions for customer billing on that particular work order (e.g. if a new light is installed, if a HPS light is replaced with an LED, if a light is removed, etc.). The billing database and work request database are not built to track those changes by individual light and customer, only in the aggregate for each month. The Lexington Operations Center takes extra steps to track changes at the individual light level for LFUCG in a standalone database.

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**Question No. 11**

**Responding Witness: John K. Wolfe**

Q-11. Are streetlight customers entitled to bill credits or other compensation for outages?  
If the answer is yes, please:

- (a) Describe or document any such policies and practices and under what authority or agreement they have been implemented.
- (b) Address whether credits, or other compensation, are granted automatically or if they require a request and documentation from the customer.
- (c) Provide an accounting for 2017, 2018 and, 2019 for total outage-related bill credits or compensation, and if credits are granted for different reasons break down the accounting accordingly.

A-11. No.

**KENTUCKY UTILITIES COMPANY**

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**Question No. 12**

**Responding Witness: John K. Wolfe**

Q-12. Refer to Response to LFUCG 1-15, 1-22, and 1-25.

- (a) Is there any technology available, used by other utilities, that can identify street light outages without the need for human inspection?
- (b) Assuming so, what is the cost for such technology and what does it consist of?
- (c) Is the Company familiar with Citytouch, by Phillips or Current, by GE? If so, has the Company considered these applications?
- (d) See answer to LFUCG 1-25(a) regarding mobile applications that allows street light outages to be "geo-,tagged" or otherwise noticed to the Company. What is status of the "company considering the feasibility of developing this type of feature on the Company's App or Website"?
- (e) Has Company reviewed what other utilities have done regarding this?
- (f) If so, which utilities?

A-12.

- (a) Yes
- (b) There is a variety of technology that provide this service, referred to as Streetlight controllers or as Smart Lighting devices. The most common application is a controller (or smart device) that replaces the traditional photoelectric control and attaches to the NEMA 7-Pin Receptacle that comes standard on the LED fixtures the Company is installing. These controllers generally communicate through a mesh network or through a cellular connection, and report the status of the light to a central hub. Most of the products provide a range of additional capabilities beyond monitoring, such as the ability to turn the fixture on and off remotely, dimming, motion sensing to turn the light on as vehicles approach, traffic and pedestrian counting, public Wi-Fi, cameras, air quality monitoring, and gunshot detection, and more. The

company has seen controller pricing ranging between \$100 per unit and \$3,500 per unit, not including installation, commissioning, connectivity (cellular or mesh network), maintenance and troubleshooting costs, and annual software license fees necessary to manage and use the controllers.

- (c) The Company is aware of these products and has not considered them for application at this time.
- (d) The Company is evaluating internal development vs. purchasing a product from a software provider.
- (e) Yes. The Company participates in various industry groups and conferences that help the Company stay abreast of innovations in lighting technology.
- (f) The Company found and reviewed two utilities that have deployed this technology, Duke Energy and Oncor Electric.



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**Question No. 13**

**Responding Witness: John K. Wolfe**

Q-13. Refer to Response to LFUCG 1-18.

- (a) Does the average time to repair of 2.01 days in 2020 include outages identified through the patrol-and-fix practices described in the answer to question 15?
- (b) If so, what was the average time to repair for outages other than those identified and addressed by patrol-and-fix?
- (c) What is Standard Operating Procedure for repair calls including how the contractor is chosen?
- (d) Does the process differ based on how the Company receives the outage report?

A-13.

- (a) Yes.
- (b) Work requests generated during patrols are not differentiated from other work requests generated by company personnel and cannot be removed from the metric.
- (c) For standard operating procedure for repair calls please see response to LFUCG 1-21. Lighting maintenance contractors for the Lexington area are selected through the Company's normal sourcing process and once that relationship is established lighting repair work orders are directed to that contractor.
- (d) No.

**KENTUCKY UTILITIES COMPANY**

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**Question No. 14**

**Responding Witness: John K. Wolfe**

- Q-14. Refer to Response to LFUCG 1-22(b) stating that the rate schedule provides KU two business days to initiate a repair. Is there any time standard within which the company is required to complete a repair and restore service? If the answer is yes, please identify under what authority or agreement the standard has been established, and how the Company communicates that standard to customers.
- A-14. No, see the response to LFUCG 1-18 for the average time to restore service for light outages.

**KENTUCKY UTILITIES COMPANY**

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**Question No. 15**

**Responding Witness: John K. Wolfe**

Q-15. Refer to Response to LFUCG 1-24, which states that Based on historical maintenance the Company expects to replace approximately 2,095 fixtures with LED fixtures each year over the next 5 years.

- (a) Confirm that the Company's expectation to replace approximately 2,095 fixtures per year is for the Company's entire system, and not only within Fayette County.
- (b) If customers request conversion of traditional street lighting to LED lighting, does the Company anticipate that there will be a maximum capacity of conversions that can occur in one year? If so, what is that anticipated maximum capacity?
- (c) What assurances will the Company provide that it will not prioritize replacing traditional RLS lights with lower rates than their LED equivalent?

A-15.

- (a) The 2,095 figure is for the entire KU system.
- (b) The Company does not have a specific maximum number of conversions it can complete in one year. The Company will work with any customer who seeks a conversion to LED to complete that request in a timely manner, acceptable to both parties. High volumes will necessarily take more time to complete from both a labor availability and materials acquisition standpoint, and very large requests may take more than one year to complete. For example, if LFUCG sought to convert all of the ~30,000+ lights provided to LFUCG by the Company, that project will likely take longer than one year due to logistical constraints.
- (c) The Company understands this question to ask what assurances the Company can provide that it will not replace failed traditional RLS lights with a traditional RLS light. The Company is replacing failed fixtures upon failure and has no other priority replacement plan. With the exception of the Company's non-

LED post-top light offerings, today, an LED fixture is replacing all of the Company's failed non-LED lights. The Company expects to exhaust the remaining inventory of non-LED post-top fixtures in 2021, consistent with the removal of the spot replacement and continuity language from the RLS Rate Schedule proposed in this rate proceeding, at which time an LED will replace any failed non-LED post top light.

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**Question No. 16**

**Responding Witness: William Steven Seelye**

- Q-16. Describe how revenue received from the Pole Attachment rates effectively results in lower rates for street lighting. Within your answer, please identify where this is demonstrated in the Company's Application materials.
- A-16. Revenues from Pole Attachment charges are included in Other Operating Revenue and thereby serve to reduce the revenue requirement for the Company's electric service customers. Revenue from Pole Attachment charges are included in Other Rent from Electric Property on Schedule M-2.3 of the Company's Application. The revenues included in Other Operating Revenue reduce the revenue requirement that would otherwise be collected from Sales to Ultimate Customers.

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**Question No. 17**

**Responding Witness: Robert M. Conroy**

- Q-17. Please refer to the Response to LFUCG 1-41. Why do the tariffs in some schedules say "franchise fee" and some say "franchise fee riders"?
- A-17. The Franchise Fee is an Adjustment Clause and not a Rider. "Rider" was inadvertently added to the new tariff sheets for General Service Time-of-Day Energy Service ("GTOD-Energy"), General Service Time-of-Day Demand Service ("GTOD-Demand"), and Economic Relief Surcredit ("ERS"). The Company proposes to remove the word "Rider" from those tariff sheets when filing the tariffs pursuant to the Final Order of this proceeding.

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**Question No. 18**

**Responding Witness: Lonnie E. Bellar**

Q-18. Please refer to the Response to LFUCG 1-42(a) referencing Table 2 of the Meter Life Study in Exhibit LEB-3, Appendix C.

- (a) Are the electromechanical meters with a total failure rate in 70 years those contemplated in the Company's Status Quo scenario?
- (b) The Company's requested meters total failure rate is 28 years, less than ½ the comparable meters, has the company compared the cost of the status quo versus the requested meters over the 70-year period?
- (c) If so, please provide.
- (d) If not, why not?

A-18.

- (a) See Appendix C of Exhibit LEB-3, 2019 Meter Life Study. Electromechanical meters comprise approximately 75% of the Companies' existing meter population today; however, electromechanical meters are no longer commercially available, and the Companies have not installed any new electromechanical meters since 2008. In the Status Quo scenario, electromechanical meters are replaced with non-communicating electronic meters as they fail. The Status Quo does not contemplate installation of new electromechanical meters because they are not commercially available, but the Status Quo does contemplate the failure of existing electromechanical meters (and replacement thereof with new non-communicating electronic meters) using the failure curves referenced in the Electromechanical Meter Failure Rate in Table 2 of the Meter Life Study.
- (b) See response to part a. The standard replacement option in the Status Quo is a non-communicating electronic meter. As stated in Section 3 of Exhibit LEB-3, AMI meters and non-communicating electronic meters share the same meter platform, and aside from the ability to communicate via the mesh network and remotely connect and disconnect service, an AMI meter is no different than a

non-communicating electronic meter. The expected operating lives of both AMI and non-communicating electronic meters are identical. The Companies have not compared the cost of the Status Quo versus the requested AMI meters over a 70-year period.

- (c) Not applicable.
- (d) The Companies elected to use a 30-year analysis period because cash flows begin to approach a steady-state across all alternatives, and a 30-year period provides sufficient time to evaluate costs and benefits over more than one meter replacement cycle. See Figure 10 in Section 5.1 of Exhibit LEB-3, which shows that the cash flows of the AMI alternative are consistently favorable to the Status Quo after the initial deployment period. Extending the analysis period by any number of years will improve the favorability of AMI versus the Status Quo.



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**Question No. 19**

**Responding Witness: Kent W. Blake**

Q-19. Please refer to the Response to LFUCG 1-46. Please detail the assumptions used by KU in concluding that the combined revenue requirement is zero.

A-19. Note that the last row of Exhibit KWB-2, page 2 (15-year meter life) and page 3 (20-year meter life) shows no change to the combined revenue requirement of the Companies for 10 years following full deployment with a net reduction in the revenue requirement for years beyond that. Assumptions with respect to ratemaking treatment are detailed in Blake direct testimony beginning on page 9, row 14 and concluding on page 18, row 9. Specific assumptions used in the analysis are included in the bottom left corner of page 1 of both Exhibit KWb-1 and Exhibit KWB-2. Key assumptions regarding the meters and operational costs and savings are included in sections 5 and 6 of Exhibit LEB-3 to Mr. Bellar's testimony.

**KENTUCKY UTILITIES COMPANY**

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**Question No. 20**

**Responding Witness: Lonnie E. Bellar / Kent W. Blake**

- Q-20. Please refer to the Response to LFUCG 1-46 and KWB-2, which identifies Status Quo meter reading and field services on the order of \$22M and \$17M, respectively. Please provide support for the derivation of these figures.
- A-20. See sections 6.3 and 6.4 of Appendix A within Exhibit LEB-3 for supporting detail regarding the derivation of these figures. The difference between the values reported for Meter Reading in 2026 in Table 20 of Exhibit LEB-3 and what is shown in Exhibit KWB-2 is that Exhibit LEB-3 reflects values on a calendar year basis while Exhibit KWB-2 reflects values from July through June. The same explanation applies for the difference between values for Field Services in Table 22 and Exhibit KWB-2.

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**Question No. 21**

**Responding Witness: Kent W. Blake**

- Q-21. Please refer to the Response to LFUCG 1-46(c): Is it possible that a Cost of Service Study for the rate impact of AMI proposal could require rate increases for a customer class even though the projections currently provided by the Company's current "combined revenue requirement impact is shown as zero"?
- A-21. It is important to note that the last row of pages 2 (15-year meter life) and 3 (20-year meter life) of Exhibit KWB-2 shows no change in the combined revenue requirement of the Companies for ten years with a reduction in the combined revenue requirement for each year beyond that. The Company has not performed an allocation of costs or savings specifically to the various classes of customers in this proceeding. Such allocation will be performed through the cost of service study in the base rate case following implementation when AMI costs and benefits are initially reflected in retail rates. As such, it is premature to speculate on the rate impact for individual customer classes.

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**Question No. 22**

**Responding Witness: Kent W. Blake**

- Q-22. Please refer to the Response to LFUCG 1-46. if the Company is unsuccessful in its CPCN application for the AMI proposal does it plan to follow the status quo scenario as outlined in the application? If not, what other options are there?
- A-22. The Company believes and expects its AMI proposal will be approved. The Companies' cost-benefit analysis has demonstrated that full deployment of AMI represents the least cost option among the various alternatives considered to provide service while also providing several incremental reliability and customer service benefits. If the Companies' CPCN application is denied, the Companies would need to consider the stated reasons provided for that decision before considering any alternative path forward relative to the status quo.

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**Question No. 23**

**Responding Witness: Eileen L. Saunders / John K. Wolfe**

Q-23. Please refer to the Response to LFUCG 1-47(a). For the AMI meters in use in Louisville's "downtown network" over the last 10 years

- (a) How many actual AMI meters were installed?
- (b) This item intentionally left blank.
- (c) This item intentionally left blank.
- (d) What was the actual failure rate of these meters?
- (e) What type of failures occurred?
- (f) What savings did these meters provide the Company?
- (g) What savings did these meters provide the ratepayers?
- (h) What rate classifications used these meters?
- (i) Were customers able to expand their rate options?
- (j) Where TOD rates available?
- (k) If so, how many changed to TOD rates in response to the AMI option?

A-23.

- (a) There are 1,605 AMI meters installed as part of the downtown network.
- (b) N/A.
- (c) N/A.
- (d) Nine downtown network meters have failed to date.

- (e) Six meter failures were the result of electronic component failure and three due to physical damage.
- (f) See response to subpart (g) below. The Company achieves efficiencies from enhanced operations and decision-making, and such efficiencies create benefits and savings for ratepayers. Those efficiencies serve the purpose of providing safe and reliable service to our customers in a cost effective manner.
- (g) The AMI meters in use in the downtown network have been used for engineering analysis and have resulted in improved model accuracy for power flow, and fault analysis in the downtown network. The resulting data enhances reliability maintenance activities in the downtown network through increased knowledge of loads for switching operations, contingency analysis, and outage planning. The model guides decision on construction and maintenance such as underground vaults and conductor. Improved decision-making resulting from these AMI lead to more efficient operations and maintenance, benefitting ratepayers. The additional systems and automation included in the Companies' current AMI proposal is necessary to enable additional savings which will accrue to ratepayers.
- (h) The downtown network meters include customers on Residential Service, General Service, Power Service, Time-of-Day Secondary Service, and Metered Traffic Energy Service and Lighting Energy Service rates.
- (i) Customers on Residential Service within the downtown network were also eligible to optionally select one of the Company's Residential Time-of-Day rates consistent with all Residential Service customers.
- (j) Yes.
- (k) None of the 340 AMI downtown network meters associated with Residential Service adopted one of the Company's optional Residential Time-of-Day rates.

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**Question No. 24**

**Responding Witness: Lonnie E. Bellar**

Q-24. Please refer to the Response to LFUCG 1-47(c), referencing the answer to LFUCG 1-42(a).

- (a) In DR 1-47(c), the company says, "AMI meters are assumed to have the same failure rates as non-communicating electronic meters." Are these "non-communicating electronic meters" different than the "electromechanical meters" with the 70-year total failure rate shown in Table 2 of the Meter Life Study in Exhibit LEB-3, Appendix C?
- (b) If so, what are the meters described as "electromechanical meters" with the 70-year total failure rate shown in Table 2 of the Meter Life Study in Exhibit LEB-3, Appendix C?
- (c) What are the "non-communicating electronic meters" referred to in the answer to LFUCG 1-47(c)?
- (d) If they are the same meters, how does the Company explain its contradictory answers to LFUCG 1-47(c) and LFUCG 1-42(a)?
- (e) Which meter is the Company using as the status quo alternative to the AMI proposal?
- (f) If the answer to (e) is "non-communicating electronic meters," please provide a chart like that provided in Table 2 of the Meter Life Study in Exhibit LEB-3, Appendix C, with the "non-communicating electronic meters" added.

A-24.

- (a) Yes. See response to Question No. 18.
- (b) As stated in Appendix C of Exhibit LEB-3, the 2019 Meter Life Study, electromechanical meters, or analog meters, are an older technology which measures energy by counting revolutions of a metal disc that rotates as energy flows. The electromechanical meters are part of the Companies' existing meter

population but are no longer commercially available. See response to Question No. 18.

- (c) As stated in Appendix C of Exhibit LEB-3, the 2019 Meter Life Study, electronic meters, or digital meters, rely on sensors that transmit data to a digital display. AMI and AMR meters are subsets of electronic meters with communications, and their operating lives are expected to be functionally equivalent to that of non-communicating meters because they have the same meter platform. A “non-communicating electronic meter” is simply an electronic meter without communications capabilities.
- (d) See responses to parts b and c. Electromechanical meters and non-communicating electronic meters are not the same meters.
- (e) The standard replacement meter in the Status Quo is a non-communicating electronic meter.
- (f) Non-communicating electronic meters are a subset of electronic meters. The requested data is available in Table 2 under the column Electronic Meter Failure Rate.



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**Question No. 25**

**Responding Witness: Kent W. Blake / Eileen L. Saunders**

Q-25. Please refer to the Response to LFUCG 1-47, 1-53, and 1-59.

- (a) Will multi-factor authentication be required to access customer data provided by the AMI meter?
- (b) If not, how will consumer data access be protected?

A-25.

- (a) The current access process does not require multi-factor authentication. This may change in the future as the Company continues to evaluate and implement authentication practices.
- (b) Access is protected by username and password. Where customers access their data through a mobile app, biometric access can be elected by the customer after successfully connecting the app to their account by username and password.

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**Question No. 26**

**Responding Witness: Eileen L. Saunders**

Q-26. Please refer to the Response to LFUCG 1-48.

- (a) Explain how will KU know when the back-up power capacitor is failing or has failed?
- (b) Do the proposed meters have self-diagnostics?
- (c) The Response indicated the lifecycle replacement has been included in Ongoing Maintenance projections show in LEB-3 6.1 and 6.2, but there is not an increase in these costs on KWB-2's 15- and 20-year rate making projections.
  - i) Confirm that it is reasonable to anticipate maintenance costs would increase in years 15-20 due to anticipated meter and capacitor failures.
  - ii) Please explain why there would not be an increase in costs in KWB-2's 15- and 20- year rate making projections

A-26.

- (a) The Company will use analysis of the event reporting from the meter to identify capacitor issues.
- (b) Yes.
- (c)
  - i) Confirmed.
  - ii) The data in tables from sections 6.1 and 6.2 of Exhibit LEB-3 is not directly comparable to data in tables from Exhibit KWB-2, because the former is expressed as cash flows, while the latter is expressed as revenue requirements. In addition, Exhibit LEB-3 reflects values on a calendar year basis while Exhibit KWB-2 reflects values from July through June. The cost items referenced in response to Metro 1-48 are capital costs, and the comparable line items from Exhibit KWB-2 are Cost of Capital,

Depreciation, and Property Taxes, of which the lifecycle replacement costs are a component. The values for these line items of Exhibit KWB-2 do begin to increase gradually in the last few years of the data shown on these tables.

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**Question No. 27**

**Responding Witness: John K. Wolfe**

- Q-27. Please refer to the Response to LFUCG 1-50. Please state the type of information/data coming from both SCADA and AMI that would overlap.
- A-27. SCADA data contains information about the primary distribution system whereas AMI data will provide information specific to the secondary distribution system that SCADA cannot measure. While they do provide similar information that is used by multiple systems, each information system has its own benefits and neither will be used in place of the other.

There will be some crossover where data can be used from both systems to help pinpoint outages and energized downed conductors, as described in the Electric Power Research Institute report included as attachment JKW-2 pages 24-27 of 44. Individual meter information is fed to the Outage Management System (OMS) where it is compared with information from distribution devices (for example breakers or reclosers) to predict the outage

Several other DMS functions will utilize information from both systems as well to increase performance and accuracy. Voltage data from both systems would be utilized by Volt-VAR Optimization (VVO) and Conservation Voltage Reduction (CVR). Power/energy measurements will be used from both systems for load flow calculations which are critical for Feeder Load Management (FLM), Fault Location Analysis (FLA), Fault Location Isolation and Service Restoration (FLISR), and PowerFlow/State Estimator functions on the DMS.

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**Question No. 28**

**Responding Witness: Eileen L. Saunders**

- Q-28. Please refer to the Response to LFUCG 1-51. For additional background, LFUCG currently has just under 1,200 accounts with KU. More than half of these accounts (rate codes 10, 20, 110, 113, 290, 295, 297, 562, and 568) will be directly impacted by the proposed AMI project. With such a large number of meters, any automated response system to an outage or issue has the potential to overwhelm LFUCG's incoming phone system, or email accounts. In addition, even on smaller issues, it may be difficult for the automated response system to adequately identify the account, meter, address. LFUCG is not unique in this situation and other major accounts may have similar issues, such as property management entities and apartment complex owners. These same issues are expected to impact the MyMeter interface as well. LFUCG is very concerned that these critical communication and information points and tools touted as key factors to improve communication as part of the proposed AMI project will have inherent flaws for Major Account holders unless they are included in the design from day one of development, as opposed to being addressed by Key Account representatives after deployment when there will not be resources to reprogram major systems, if needed. The identification of multiple types of information management arrangements was discussed as a key point during the 2017 AMS collaborative. Please explain how these issues that may impact Major Accounts will be implemented into the proposed AMI project from the initial design phases.
- A-28. The Company always endeavors to implement functionality that best meets the diverse needs of its many customers, including Major Account holders. The Company intends to use feedback from customers (including Major Account holders), peer utilities, and business partners to design these tools around leading practices in the industry. The Company would also note that all automated responses must be enabled by the customer so customers will continue to have the ability to tailor the messages that are of most interest to them.

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**Question No. 29**

**Responding Witness: Eileen L. Saunders**

Q-29. Please refer to the Response to LFUCG 1-52, wherein the term “validated” was underlined in the response addressing the process if the proposed AMI deployment is approved.

- (a) Is the current data from Opt-in meters not validated?
- (b) Please explain the process of how this data will be validated in the proposed AMI project.

A-29.

- (a) Currently the interval data provided to AMS Opt-in customers is considered “raw” data, meaning it is going directly from the Head-End system to MyMeter for presentment. A meter data management system (MDMS) is required to perform the function of validation where interval data is processed for billing quality purposes. This is considered “validated” data. Currently, AMI interval data is not being used for billing purposes.
- (b) As part of the proposed AMI project, a MDMS will process meter interval data and identify data anomalies such as gaps, overlaps and redundancies, tolerance issues between consumption reads and interval data, and corrects those gaps according to business process rules to provide fundamental data validation.

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**Question No. 30**

**Responding Witness: Eileen L. Saunders**

Q-30. Please refer to the Response to LFUCG 1-53.

- (a) Will KU commit to not obtaining the disaggregated data without: (1) providing notice to its customers, and (2) obtaining PSC approval?
- (b) Does the commitment to not sell customers' energy usage data including future data collected, such as the data which it may obtain from future analytics' system?
- (c) Does the data collected from AMI increase the risk to customers' data being breached? If so, why?
- (d) Please provide all documentation, research, presentations, internal and external communications regarding advanced analytics, data mining, load or use identification associated with the proposed AMI project, specifically for information at the meter level.
- (e) Use of analytics to identify specific loads, use, equipment/device, and use patterns at the meter level does not appear to be a critical business need. This information done at the circuit level would seem sufficient to identify any clear business needs, e.g. infrastructure improvements. Please explain why KU needs to have the ability to "See behind the meter" using advanced analytics in comparison to at the circuit level.
- (f) Please provide a list of all data points the AMI proposed meters are capable of measuring.
- (g) Please provide a list of all data points the AMI proposed meters are capable of measuring that KU intends to record and the interval of those readings.
- (h) Please provide a business use/need for each AMI proposed meters data point KU intends to record and analyze.

- (i) Has KU developed a policy under which it will share or allow third parties to access meter level data, including any developed as a result of advanced analytics from data obtained via AMI meters? This response may disregard data sharing that has been “specifically” authorized by the customer, e.g., to a third-party energy efficiency contractor or landlord

A-30.

- (a) The Company’s privacy policy found at lge-ku.com/privacy sets forth the Company’s position on the first part of this request. Further Commission approval is not required.
- (b) The Companies’ privacy policy does not allow the selling of customer meter data without written authorization. See the response to Question No. 31.
- (c) No.
- (d) There is no advanced analytics, data mining, load or use identification included in the proposed AMI project.
- (e) As discussed in response to Metro 1-53, the goal of advanced analytics is to provide more reliable and affordable service to customers. Data analytics cannot be used with circuit-level data to reduce theft or automatically notify the Companies in the case of an outage or meter malfunction.
- (f) See Exhibit 5, on page 1 under Key Features and page 2 in Display Options for a summary level overview. A full list of load profile data points that can be measured is below. The list below does not cover all capabilities of the meter to issue “alerts” such as meter removal or tampering.

Delivered kWh	Sag V Ph. A
Received kWh	Sag V Ph. B
I <sup>2</sup> /Ih Ph. A	Sag V Ph. C
I <sup>2</sup> /Ih Ph. B	Swell V Ph. A
I <sup>2</sup> /Ih Ph. C	Swell V Ph. B
V <sup>2</sup> h/Vh Ph. A	Swell V Ph. C
V <sup>2</sup> h/Vh Ph. B	Sag V Any Ph.
V <sup>2</sup> h/Vh Ph. C	Swell V Any Ph
Delivered kVARh	Received kVARh
Delivered kVAh	Received kVAh
Delta Temperature	Frequency
Temperature	Average Power Factor
Delivered kWh Rate A	Received kWh Rate A
Delivered kWh Rate B	Received kWh Rate B
Delivered kWh Rate C	Received kWh Rate C



Delivered kWh Rate D	Received kWh Rate D
Delivered kWh Rate E	Received kWh Rate E
Delivered kVARh Rate A	Received kVARh Rate A
Delivered kVARh Rate B	Received kVARh Rate B
Delivered kVARh Rate C	Received kVARh Rate C
Delivered kVARh Rate D	Received kVARh Rate D
Delivered kVARh Rate E	Received kVARh Rate E
Delivered kVAh Rate A	Received kVAh Rate A
Delivered kVAh Rate B	Received kVAh Rate B
Delivered kVAh Rate C	Received kVAh Rate C
Delivered kVAh Rate D	Received kVAh Rate D
Delivered kVAh Rate E	Received kVAh Rate E
Voltage Min (Phase A)	Voltage Max (Phase A)
Voltage Min (Phase B)	Voltage Max (Phase B)
Voltage Min (Phase C)	Voltage Max (Phase C)
Current Min (Phase A)	Current Max (Phase A)
Current Min (Phase B)	Current Max (Phase B)
Current Min (Phase C)	Current Max (Phase C)

- (g) The Company expects to record delivered kWh, received kWh, delivered kVARh, received kVarh, and voltage per phase. Current per phase may also be recorded in some cases. All data points are expected to be in 15-minute intervals.
- (h) The kWh and kVARh data points are needed for billing purposes. All listed data points additionally support engineering analysis including but not limited to power flow modeling and the uses described in Exhibit JKW-2.
- (i) Treatment of additional data generated by AMI implementation will be subject to the Company’s existing privacy policy found at [lge-ku.com/privacy](http://lge-ku.com/privacy).

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**Question No. 31**

**Responding Witness: Eileen L. Saunders**

Q-31. Please refer to the Response to LFUCG 1-53(b). The Companies state that they “previously committed to not sell customer energy usage information.”

- (a) How was this commitment stated or provided?
- (b) What is penalty if the company violated this commitment?
- (c) Is this commitment in the tariff?
- (d) If not, will the company put the commitment in the tariff?
- (e) Has the company sold any other customer data to any entity?
- (f) Will the company commit to not sell any customer data to outside entities in the future?

A-31.

- (a) The Companies have confirmed in testimony filed in this proceeding and in previous Commission proceedings that they are committed not to sell individual customer data to third parties.<sup>1</sup> Furthermore, the Companies’ customer privacy policy restricts disclosure of customer account information to certain narrow situations, which do not include sale of individual customer account information to third-parties without written authorization.<sup>2</sup>
- (b) Action by the Commission.
- (c) No.

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<sup>1</sup> Case No. 2020-00349, Case No. 2020-00350, Testimony of Eileen L. Saunders, at p. 35 (filed Nov. 25, 2020), citing *Electronic Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity for Full Deployment of Advanced Metering Systems*, Case No. 2018-00005, Hearing Video at 1:59:11 – 1:59:16.

<sup>2</sup> <https://lge-ku.com/privacy>

- (d) No. The Companies' privacy policy is maintained outside the tariff and adequately protects against disclosures contrary to its terms.
- (e) The Companies abide by their privacy policy which prohibits the disclosure of individual customer account information except in certain narrow situations, which do not include sale of individual customer account information to third-parties without written authorization.
- (f) See the response to part (a).

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**Question No. 32**

**Responding Witness: Eileen L. Saunders**

- Q-32. Please refer to the KU Response to LFUCG 1-58. Regarding customer connection to AMI via Zigbee, please describe what equipment/software is needed by the customer, such as the make/model of the "bridge."
- A-32. See generally the response to AG-KIUC 1-214. The Company is unable to describe in further detail the equipment/software needed as there are many devices commercially available and the required equipment or software will vary by device. The Company has committed to supporting customers through the Company's online Marketplace program.

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**Question No. 33**

**Responding Witness: Kent W. Blake**

Q-33. Please refer to the KU Response to LFUCG 1-59(a).

- (a) Are the 24 employees dedicated to cybersecurity for LG&E, LKE or throughout all of PPL?
- (b) Do these 24 employees handle cybersecurity throughout generation, transmission and distribution? If not, what do these 24 specifically handle?
- (c) What tools are used to ensure cybersecurity of the customers data assisting the cybersecurity team?

A-33.

- (a) The employees are dedicated to cybersecurity for LG&E, KU and LKE.
- (b) Yes. The 24 employees provide cybersecurity support for the IT supported network including layers of defense to protect operational technology and industrial control systems. Operational and industrial control systems cover generation, transmission, and distribution.
- (c) The Company maintains a defense in depth approach to protect customer information including network firewalls, an intrusion prevention/detection system, antivirus software, and a data loss prevention system.

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**Question No. 34**

**Responding Witness: Kent W. Blake / Eileen L. Saunders**

- Q-34. Please refer to the KU Response to LFUCG 1-59(g). Will KU commit to notifying LFUCG if its LFUCG's data has been breached?
- A-34. In the event of a confirmed compromise of LFUCG's data that would otherwise be inconsistent with KU's privacy policy, KU will take all appropriate action, including notifying LFUCG.

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**Question No. 35**

**Responding Witness: Robert M. Conroy / Eileen L. Saunders**

Q-35. Please refer to the KU Response to LFUCG A-60(b).

- (a) Please refer to the last sentence, "The advanced motor deployment schedule has meters installed from late 2022-2026." Does that include all meters including those Power Service meters served by the company's Itron MV-90 system?
- (b) What is the location of LFUCG Power Service meters currently not billed by Itron's MV-90 system?
- (c) Exhibit 5 of the Application listed only model meters with 200A and 320A ratings. Please provide data sheets for any other meters that will be used for PS applications where the rating may be above 320A.
- (d) LFUCG is a user of the current MV-90 system, interval data is delayed at least 30 days, and LFUCG has experienced delays of up to 11 months.
  - i. With the full implementation of the RF mesh network, will there be any improvements or benefits to the MV-90 interval data collection and availability to the customer, e.g.. will the reporting lag be reduced? If not, why?
  - ii. What would it take to interconnect the MV-90 to the new RF Mesh network? If interconnection is possible, would it result in near real time readings with the ITRON MV-90 meters?
  - iii. If the response is no, it is not possible, or it was not included in the proposed AMI project for that reason; Was there any research or discussion of including of a compatible meter for TOD and PS meters to take advantage of the new RF mesh network? Would the inclusion of these meters then result in a further reduction of meter reading services, a key cost reduction measure for the proposed AMI project?

- (e) LFUCG currently has accounts that started out as TOD accounts, thus requiring the MV-90 meter. Some of these accounts have changed use/demand profiles and are now PS accounts thus not needing MV-90 metering. The proposed AMI project results in 24 hour lag on interval data vs the MV90 minimum of 30 day lag. Will it be possible to request AMI meters be installed at PS accounts that currently have MV90 meters, but do not require them for their current billed rate code?

A-35.

- (a) To clarify, the last sentence reads “The advanced *meter* deployment schedule has meters installed from late 2022-2026.” (emphasis added) It includes all meters in scope for the AMI project, which does include some of the Power Service meters currently served by the MV-90 system. The Company currently relies on the MV-90 system for billing determinant calculation where interval data is required. If the AMI proposal is approved the Company expects the Meter Data Management System will support interval data billing for many of the Power Service and Time-of-Day meters that currently require the MV-90 system while others, namely those requiring complex calculations e.g. in totalized billing, are expected to remain in the MV-90 system.
- (b) See attached.
- (c) See attached supplemental sheets.
- (d)
  - i. Yes, the Company expects interval data collection and availability to be improved. If the AMI proposal is approved, the Company will continue to look for opportunities to reduce the reporting lag for Key Accounts like LFUCG.
  - ii. The Company will need to evaluate options to interconnect the MV-90 system with data collected over the new RF Mesh network. The Company will commit to evaluating these options as part of the proposed AMI project if it is approved.
  - iii. N/A
- (e) Yes, though no request is necessary. Meters that do not require the MV-90 system for billing determinant calculation will be changed to AMI meters and move to the Meter Data Management System. The Companies would also clarify that AMI interval data is expected to be available every 4 – 6 hours. See the response to LFUCG 1-52.



<b>Meter Number</b>	<b>Location</b>
2807399	427 PARKWAY DR
2807553	208 E MAIN ST
C527459	NA NEWTOWN RD
L155393	1779 OLD FRANKFORT PK
2802267	141 E MAIN ST
2800081	300 E THIRD ST THEATRE
C527268	215 E THIRD ST 221 E
2850381	675 BYRD THURMAN DR
2805037	1306 VERSAILLES RD
2804000	495 PARKWAY DR
C531442	200 E MAIN ST
2805556	669 BYRD THURMAN DR
2806399	498 GEORGETOWN ST
L154338	522 PATTERSON ST
2807050	251 W SECOND ST
C523428	2589 WINCHESTER RD PUMP STA
2850828	1875 NEWTOWN PIKE PUMP STA
2806303	220 E MAIN ST OFFICES
C526558	150 E MAIN ST
2803417	1135 HARRY SYKES WAY
L154752	150 E MAIN ST
2804547	1177 HARRY SYKES WAY
2850402	115 CISCO RD PSOC
2802512	545 N UPPER ST
2850583	195 LIFE LN
2806157	3403 KEARNEY RD GLF CRSE
2850554	301 LISLE INDUSTRIAL
2805820	2754 MAGNOLIA SPRINGS DR



## Commercial: E330 FOCUS AX Polyphase



### *Economical and Reliable Option for Light Commercial Applications*

The FOCUS® AX Polyphase meter provides a cost-efficient alternative for light commercial metering applications that do not require all of the functionality of the S4e meter. As an addition to the FOCUS family of meters, the AX Polyphase brings the same proven solid-state performance utilities have come to expect from FOCUS meters, in an economical and AMI-ready platform for commercial and industrial applications.

A single circuit board design, mounted at the front of the meter allows room for modular AMI communications or a KYZ output board. Highly accurate load performance and the use of field-proven Digital Multiplication Measurement Technique ensure reliability and dependability during the entire life of the meter.

The FOCUS AX Polyphase meter is available for both self-contained and transformer-rated meter forms and includes the ASIC, non-volatile memory, selectable metrics, flexible display functionality, an optional KYZ output, configuration port, and a customer program option.

The FOCUS AX Polyphase meter contains a 120V to 277V auto-ranging power supply that is suitable for both 277/480V, 4W, WYE and 240/480V 4-wire Delta services. The robust design of the FOCUS AX meter exceeds the ANSI 6KV surge requirements and provides 10KV of surge protection.

With customer satisfaction as our top priority, we are committed to providing the best metering solution in terms of capability, technology and affordability. By uniting our experience and technology with that of our strategic allies and development partners, we provide metering solutions that cover the range of utilities' light commercial and industrial need.

#### **FEATURES & BENEFITS:**

*Why Landis+Gyr makes a difference.*

- Digital Multiplication Measurement technique
- Non-volatile memory
- Designed for a 20+ year life
- Meets or exceeds industry and ANSI standards
- Uses ANSI protocol (between meter and advanced metering device)
- 6 digit LCD and 3 Alpha ID
- Selectable meter multiplier
- Event log of 500+ entries
- 77 kb of load profile memory, 1-8 channels
- Advanced second generation over-the-air-flashable firmware

Product Specifications: **E350 FOCUS Polyphase****Specifications**

General Specifications	Active Energy “kWh-kW” meter	
	Digital Multiplication Measurement Technique	
	Non-Volatile Memory	
	Designed for 20+ years life	
	Meets ANSI standards for performance	
	Utilizes ANSI protocol (between meter and AMI device)	
	9-Digit LCD	
	Display scroll sequence programmable (factory or end user)	
	Configuration Port – cover does not have to be removed or optional ANSI C12.18 optical port available	
Operating Temperature	-40C to +85C under cover	
Nominal Voltage	120–277V Auto Ranging Power Supply	
Operating Voltage	80% to 120% of Vn	
Frequency	60Hz +/- 5%	
Humidity	5% to 95% relative humidity, non condensing	
Starting Load (Watts)	Class 20	0.005 Amp (0.6W)
	Class 200	0.050 Amp (6W)
	Class 320	0.080 Amp (9.6W)
Voltage Burden	< 1.8W Max	
Load Performance Accuracy	Accuracy Class 0.2%	
	Exception: Form 36S 0.5%	
	Reactive energy 0.5%	
Available Forms	Self-Contained	12S, 12SE, 16S, 16SE, 25S, 25SE
	Transformer Rated	9S, 36S, 45S
Display Options	Energy Metrics: +kWh, -kWh, Net kWh, and added kWh (Security)	
	Metric Energy Display Format – 4x1, 4x10, 5x1, 5x10, 6x1 or 6x10	
	Time of Use and Demand Billing	
AMI Platform	Modular	
Selectable Meter Multiplier	Up to 4096 as result of PT ratio • CT ratio	
Applicable Standards	ANSI C12.1 for electric meters	
	ANSI C12.10 for physical aspects of watt hour meters	
	ANSI C12.18 Protocol specifications for ANSI Type 2 Optical Port	
	ANSI C12.19 Utility Industry End Device Data Tables	
	ANSI C12.20 for electricity meters, 0.2 and 0.5 accuracy classes	
	CAN3-C17-M84 Canadian specifications for approval of type of electricity meters	

# E650 S4x Polyphase



## Enhanced Metering for Commercial and Industrial Applications

Expanding upon the industry-leading flexibility of Landis+Gyr polyphase meters, the E650 S4x sets a new standard for versatility in a C&I metering platform. Out of the box, the S4x is a full-featured C&I meter that provides four-quadrant measurements of active and reactive energy, load profile, and TOU without a battery when existing on an AMI network.

The E650 S4x provides the metrics utilities need to take full advantage of advanced grid management technologies. Delivered, received, and per quadrant measurements of active, reactive, and apparent energy are all simultaneously calculated, as are their respective demand values. Additionally, the S4x provides two alternative methods for calculating reactive and apparent energy and demand values. They can be either directly measured or vectorially derived, giving an electric utility the ultimate flexibility in how they measure and bill their customers.

The E650 S4x provides all of its metrics at significantly higher resolution than most competitive C&I meters. All energy and demand metrics are stored with milliunit resolution. All instrumentation metrics such as voltage, current, and phase are stored in microunits.

The E650 S4x raises the bar on security and tamper detection capabilities. A tilt and vibration sensor can identify significant shock force applied to the meter. A dedicated Hall effect sensor is used to detect strong magnetic field presence. The physically actuated cover removal switch can trigger an alarm and log an event. A new optical port lockout feature allows total control over port access through a compatible communication module.

The S4x has significantly more RAM, ROM, and non-volatile memory for load profile, self-reads, and event logs. Standard 16 channel load profile memory of 256 KB can be upgraded to 1 MB without the need for additional hardware.

### SUPERIOR METRICS

- Four-quadrant measurement
- Delivered and received kW, kVA and kVAR demands
- Two alternate methods of VAR and VA calculation
- Milliunit energy and demand resolution
- Microunit instrumentation resolution

### LOAD PROFILE

- 16 CH 256K standard, 1 MB option
- 2nd recorder option
- 32 bit data storage

### HARDWARE OPTIONS

- Enhanced Gridstream RF module
- I/O board
- Three-phase power supply

### UNIQUE SECURITY

- Magnetic tamper detection
- Cover removal switch
- Tilt and vibration sensor

### RF COMMUNICATION OPTIONS

- Series 5
- Series 6



SUPERIOR  
METRICS



LOAD  
PROFILE



HARDWARE  
OPTIONS



UNIQUE  
SECURITY



RF COMMUNICATION  
OPTIONS

# E650 S4x Polyphase

An optional second 16 channel recorder can be configured with a different interval length than the first, making it an ideal instrumentation recorder for continuously monitoring voltage, current, phase, and frequency. Load profile data is stored in 32 bit registers that can easily handle the increased data resolution the S4x offers without interval overflow or the need for a scale factor.

The meter is available with multiple hardware options that further expand its capabilities. With the addition of an enhanced RF communications module, the S4x becomes a powerful C&I endpoint on the industry-leading Landis+Gyr Gridstream® Connect IoT network. An I/O board enables inputs that can increment a load profile channel or trigger a different billing rate; and outputs that can provide KYZ pulses or trigger load control devices. The Enhanced RF module and I/O board are available together for even greater functional versatility. A true three-phase power supply can ensure that the S4x keeps metering, even if a voltage phase is lost.

## PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS	
<b>Specifications</b>	Active and reactive energy are standard TOU and 256K load profile are standard ANSI C12.19 standard protocol Unsurpassed 10KV surge protection for safety Designed for 20+ years of life Extensive event logging Magnetic tamper detection via Hall effect sensor Cover removal switch Tilt and vibration sensor
<b>Operating Temperature</b>	-40C to +85C under cover
<b>Frequency</b>	50 or 60Hz ± 5%
<b>Humidity</b>	Less than or equal to 95% relative humidity, non-condensing
<b>Accuracy Class</b>	Class 20, 120, 200, & 320 meters ± 0.2% Class 480 meters and forms 36S, 29S, 36A ± 0.5%
<b>Over Voltage Withstand</b>	Temporary (.5 sec) 150% rated voltage Continuous (5 hours) 120% rated voltage
<b>Voltage Burden</b>	≤ 2.5W
NOMINAL VOLTAGE	
<b>Standard Power Supply</b>	120–480V (2 and 3 wire 120, 208, 240, 277, 347, 480. 4 wire 120/208, 240/416, 277/480, 347/600)
<b>Three-phase Power Supply Option</b>	120– 277V (2 and 3 wire 120, 208, 240, 277. 4 wire 120/208, 277/480)

Kbps = Kilobytes per second

This information is provided on an “as is” basis and does not imply any kind of guarantee or warranty, express or implied. Changes may be made to this information.

OPERATING VOLTAGE	
<b>Standard Power Supply</b>	98 to 552 VAC (line to neutral) autoranging power supply
<b>Three-phase Power Supply Option</b>	98 to 318 VAC (line to neutral) autoranging power supply
STARTING CURRENT (AMPS)	
<b>Class 20</b>	0.005 Amp
<b>Class 150</b>	0.050 Amp
<b>Class 200</b>	0.050 Amp
<b>Class 320</b>	0.080 Amp
<b>Class 480</b>	0.120 Amp
AVAILABLE FORMS	
<b>Self-Contained S-Base</b>	2S, 12S, 14/15/16/17S, 25S, 1S, 2SE, 12SE, 14/15/16/17SE, 25SE
<b>Self-Contained K-Base</b>	12K, 14/15/16K, 27K
<b>Self-Contained A-Base</b>	16A
<b>Transformer Rated S-Base</b>	3S, 3SC, 4S, 8/9S, 45S, 36S, 29S
<b>Transformer Rated A-Base</b>	8/10A, 45A, 36A
APPLICABLE STANDARDS	
ANSI C12.1 for electric meters ANSI C12.10 for physical aspects of watt hour meters ANSI C12.20 for electricity meters, 0.2 and 0.5 accuracy class CAN3-C12-M84 Canadian specs for approval of electrical meters CAN3-Z234.4-79 Canadian specs for all numeric dates and times	

## GET IN TOUCH.

For more information and nationwide warranty terms, visit us at [landisgyr.com](http://landisgyr.com) or call us at 888-390-5733.



## LET'S BUILD A BRIGHTER FUTURE TOGETHER

Since 1896, Landis+Gyr has been a global leader of energy management solutions. We've provided more than 3,500 utility companies all over the world with the broadest portfolio of products and services in the industry. With a worldwide team of 1,300+ engineers and research professionals, as well as an ISO certification for quality and environmental processes, we are committed to improving energy efficiency, streamlining operations, and improving customer service for utility providers.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 36**

**Responding Witness: Eileen L. Saunders**

Q-36. Please see KU Response to LFUCG 1-61. Which meters of LFUCG will not receive an AMI meter?

A-36. The Company expects that only meters that LFUCG elects to opt-out or those requiring the MV-90 system for complex billing determinant calculation will not receive an AMI meter. All other meters will be changed to AMI meters.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
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Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 37**

**Responding Witness: William Steven Seelye**

- Q-37. Please refer to the KU Response to LFUCG 1-64. Does your Response mean that participants in the Solar Share or Business Share Programs receive credits not measured by the amount of solar energy produced by the Customer? If the credits are not measured this way, how is the amount of the credit determined?
- A-37. For the Solar Share or Business Solar Programs, the Company owns the solar facilities; therefore, the energy produced from the facilities is owned by the Company. A Solar Share or Business Solar customer pays a monthly fixed charge to receive energy from the facilities. The customer then receives monthly credits for the energy produced from the customer's share of the facilities.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 38**

**Responding Witness: Robert M. Conroy / William Steven Seelye**

Q-38. Please refer to the KU Response to LFUCG 1-68. From review of testimony referenced, it appears that the Company believes KRS 278.486(5), which allows recovery of "all costs necessary to serve its eligible customer – generators," would allow a greater recovery from net metering customers than the SQF tariff that the Companies are proposing.

- (a) Is this accurate?
- (b) If so, please explain what additional recovery the Companies believe it can recover?
- (c) Please include any analysis to support these answers.

A-38.

- (a) It is not accurate as stated. The Company does not propose to recover anything under Rider NMS-2; rather, it has proposed a cost-based compensation approach for energy produced to the Company's system by net metering customers. All cost recovery from net metering customers occurs through the Company's other applicable standard rates, riders, cost-recovery mechanisms, and other charges.

With that clarification, it is accurate that the Company believes KRS 278.466(5) allows the Company to seek different rate structures for net metering customers to ensure full and accurate cost recovery.

- (b) The Company does not propose to seek "additional recovery" in future proceedings; rather, the Company could propose alternate rate structures to ensure full and accurate cost recovery, particularly for Rider NMS-2 customers not already taking service under a rate schedule with demand charges. See Seelye Testimony at pages 46-64. The Company is not proposing such alternate rate structures in this proceeding.
- (c) See the response to PSC 2-108.



**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
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**Case No. 2020-00349**

**Question No. 39**

**Responding Witness: Robert M. Conroy / William Steven Seelye**

Q-39. Please refer to the KU Response to LFUCG 1-66, 1-68 and 1-69. Based on the very few customers who use the net metering rates, what is the actual dollar amount of the subsidies they are receiving from other customers in total and by customer by class? What would the subsidies be under the proposed tariff?

A-39. See response to PSC 2-108.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
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Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 40**

**Responding Witness: William Steven Seelye**

- Q-40. Please refer to the KU Response to LFUCG 1-81. Please break down these increased costs specifically by group in dollar amount. Explain.
- A-40. Below is the breakdown of Customer-related costs for the RS rate class as requested in this proceeding compared to what was requested in the 2018 rate case. As mentioned in the response to LFUCG 1-81, the increases in costs are due to changes in all of the cost categories shown below.

Cost Category	2018 Case	Current Case	Increase/(Decrease)
Rate Base	\$434,238,738	\$527,957,820	\$93,719,082
Rate of Return	4.99%	4.74%	-0.25%
Return	21,659,211	25,023,181	3,363,970
Interest Expenses	11,698,408	11,066,394	(632,014)
Net Income	9,960,804	13,956,787	3,995,983
Income Taxes	3,493,584	4,429,929	936,345
O&M Expenses	75,271,425	80,046,683	4,775,258
Depreciation Expenses	21,595,884	19,052,501	(2,543,383)
Other Taxes	4,521,892	4,714,686	192,794
Expense Adjustments	58,648	75,649	17,001
Misc Revenue Credits	(1,489,077)	(1,394,039)	95,038

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 41**

**Responding Witness: John K. Wolfe**

Q-41. Please refer to the KU Response to LFUCG 1-83(a). Is the 2007 Distribution Plan filed still in effect in its entirety? If not, please indicate which provisions are not in effect and documentation of what has replaced provisions in the 2007 plan.

A-41. Yes, the 2007 Distribution Plan is still in effect. However, there are three differences:

1. There are eight certified company arborists versus nine. Two of the eight are positioned in the Lexington/Midway area.
2. Additional data analytics algorithms in combination with the worst circuit list are used to designate underperforming circuits.
3. Due to the complexity of contactor bidding, distribution vegetation contractors have competitively bid a multi-year unit-based contract precluding the need to bid out work by circuit.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 42**

**Responding Witness: Lonnie E. Bellar**

Q-42. Please refer to the KU Response to LFUCG 1-83(b).

- (a) Have any of the four (4) plans attached been submitted to the PSC? If so, please state which plans were submitted and why were they submitted?
- (b) Have any of the four (4) plans been submitted to NERC or FERC for review and/or approval?

A-42.

- (a) No. In Case No. 2018-00294, KU submitted as Exhibit LEB-4 to the Direct Testimony of Mr. Bellar a third-party program review of the Transmission Vegetation Management Plan, which assessed the plan and the progress made to date on the cycled approach.
- (b) Not specifically for approval, but the plans have been provided as supporting documentation for audits performed by SERC Reliability Corporation (SERC) in 2012, 2015, and 2018. SERC is the North American Electric Reliability Corporation (NERC) delegated Regional Entity that has the authority to enforce the NERC Reliability Standards. SERC's footprint includes most of the southeast United States.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
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Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 43**

**Responding Witness: Lonnie E. Bellar**

- Q-43. What agency or agencies have jurisdiction over vegetation management and reliability standards for the transmission lines in Southpoint Drive or Lansdowne Drive, Lexington, Kentucky? NERC? FERC? Public Service Commission?
- A-43. Pursuant to its authority and jurisdiction under KRS Chapter 278 and implementing regulations, the Kentucky Public Service Commission has jurisdiction and authority to review and monitor KU's vegetation management practices and plans for the Southpoint Drive and Lansdowne Drive transmission lines, which are both under 200kV. FERC, NERC, and SERC Reliability Corporation, the latter through a delegation agreement with NERC, have jurisdiction and authority over vegetation management practices and plans for compliance with NERC standard FAC-003-4, which applies to transmission lines operated at 200 kV or higher.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
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**Case No. 2020-00349**

**Question No. 44**

**Responding Witness: Lonnie E. Bellar**

Q-44. What are the kV levels of the transmissions lines on Southpoint Drive and Lansdowne Drive?

A-44. The transmission line along Southpoint Drive is 69kV. The transmission line along Lansdowne Drive has two circuits/lines, one 138kV line and one 69kV line.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
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**Case No. 2020-00349**

**Question No. 45**

**Responding Witness: Lonnie E. Bellar**

Q-45. Please identify the location of all other transmission lines in Fayette County and the kV level of each.

A-45. See attached. The information requested is confidential and proprietary and is being provided under seal pursuant to a petition for confidential protection.

The entire attachment is  
Confidential and  
provided separately  
under seal.



**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 46**

**Responding Witness: Lonnie E. Bellar**

Q-46. Please refer to paragraph 7 on page 9 of the Transmission Vegetation Practice Plans submitted in Response to LFUCG 1-83(b).

- (a) Under what circumstances “may” nearby property owners need to be notified of work plan and schedule.
- (b) Under what circumstances are rights deemed “necessary” to procure before work occurs on private property, or Federal, State, and County road rights of way?

A-46.

- (a) Nearby property owners may be contacted when entry to their property is required to gain access to the work site (that may be located on another property in the area).
- (b) In addition to the response to part a, it may be necessary to coordinate with Federal, State, and County agencies when traffic control plans are required to complete the vegetation work.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 47**

**Responding Witness: Lonnie E. Bellar**

- Q-47. Pages 10-15 of the KU Response to LFUCG 1-84(a) appear to be a separate document from pages 1-10 of the attachment. Is that accurate? When were each of the two prepared and disseminated? Is there an equivalent document for the Cycle-based Transmission Clearance Program for KU and Lexington? The attachment appears to only be for Louisville.
- A-47. Yes, pages 1-9 are a separate document. Pages 1-9 were prepared and disseminated in August 2018. Pages 10-15 are a second document that was prepared and disseminated in March 2019. See attached for a similar document related to the work occurring along Southpoint Drive.



## **Cycle-based Transmission Clearance Program Communications Plan Fawkes – Higby Mill 69kv Southpoint Area (KU)**

### **Program Summary/Background**

As part of ongoing work to strengthen the safety and reliability of the system, Louisville Gas and Electric Company and Kentucky Utilities Company are removing and trimming trees around transmission infrastructure across the utilities' service territories. These efforts will enable the utilities to further enhance service to customers by minimizing the potential for service interruptions and large-scale outages.

Consistent with regulatory requirements, LG&E and KU routinely work to maintain areas around transmission infrastructure and rights of way to ensure trees cannot get near or fall into high-voltage transmission lines. The utilities' cycle-based approach for these efforts are industry best practices for maintaining transmission infrastructure and is part of the utilities' proactive method for keeping trees in these areas a safe distance from transmission lines and structures.

Along with other infrastructure upgrades being conducted by the utility, these efforts are expected to significantly reduce the duration of outages experienced by customers, reduce associated costs and ensure a safe, reliable system well into the future.

### **Fawkes – Higby Mill 69kv Southpoint Area Clearance Project**

The Fawkes – Higby Mill 69kv Southpoint Area Clearance Project is part of Kentucky Utilities' ongoing Cycle-based Clearance efforts and will cover vegetation surrounding a 1.2-mile section of the Fawkes-Higby Mill 69kv along Southpoint Drive and across Grey Oak Lane and Largo Lane Key informational highlights of the project are noted below.

- The Fawkes – Higby Mill 69kv Southpoint Area Clearance Project involves clearing a 1.2 mile section of 69 kV running along Southpoint Drive in Lexington
- This area off Nicholasville Road just north of the Fayette County Line.
- About 100 residential customer properties are impacted by this project work.
- A 0.70 mile portion of Southpoint Drive runs along the center of the easement and contains many street trees.
- The easement width along this line is 150 feet.
- KU will be clearing within 50 feet on each side of the line
- Portions of this work will be visible from Nicholasville Road.

This work is tentatively scheduled to take about two months, running from first to mid-June through mid-August.

### **Objectives**

- Communicate effective and timely messages to relevant audiences associated with this project.



- Convey the benefits of this work and the company's ongoing commitment to safe, reliable service, as well as the environment.
- Maintain a focus on customers to minimize the impact of, and any inconvenience associated with, the work.
- Ensure employees, including those living and working in the project areas, are informed and able to act as company ambassadors or connect with the appropriate person(s) should they receive any questions about the project.

#### **Audiences**

- Customers along this trimming route include:
  - Lexington/Fayette County Urban Government (streets)
- Adjacent neighborhoods/property owners/tenants living in or around the project area
  - Southpoint Subdivision (Fayette County)
- City/state/neighborhood elected officials, community representatives
  - Lexington Mayor – Linda Gorton
  - LFUCG
    - District 4 - Councilmember Susan Lamb
    - District 9 – Jennifer Mossotti
  - Fayette County state rep
- Business partners who will be performing the work
- Tree/vegetation related community organizations that may have interest/concern
  - Trees Lexington!
  - The Lexington Tree Board
  - Venerable Trees
- Employees who live or work within the project area
- Media (as necessary)

#### **Key Messages**

(Same as overall program talking points)

- As part of ongoing work to strengthen the safety and reliability of the system, Kentucky Utilities Company is removing trees and clearing around overhead electric transmission lines across the service territory.
- These efforts will enable the utility to further enhance service to customers by minimizing the potential for service interruptions and large-scale outages.



PPL companies

- These efforts will also help to further protect the system from the impacts of conditions similar to those seen during historic storms that hit the KU service territory in 2018.
- For context, transmission lines are essentially multi-lane energy highways that carry electricity to substations where the voltage is stepped down before being transported through distribution lines, which serve as secondary roads and side streets carrying electricity into neighborhoods and commercial areas.
- When outages occur within a transmission system, they can have widespread, large-scale impacts - like the Northeast Blackout of 2003. The blackout occurred when a tree branch came into contact with a high-voltage electric transmission line. While there were multiple contributing issues, the vegetation issue was the most significant cause. Since that time, there have been reliability standards developed to mitigate the issues. Line clearing of vegetation is a primary focus of those reliability standards.

Minimizing the potential for these types of large-scale outages is one of many reasons keeping transmission systems up to date is so critical. This project will allow KU to further strengthen electric reliability for our customers and the entire region.

- Consistent with regulatory requirements, KU routinely works to maintain areas around transmission infrastructure and rights of way to ensure trees cannot get near or fall into high voltage transmission lines.
- The cycle-based approach for these efforts is an industry best practice for maintaining transmission infrastructure and is part of our proactive method for keeping trees in these areas a safe distance from transmission lines and structures.
- The average cycle established for Transmission related tree trimming and clearance work is every 5 years, with the exception of those lines demonstrating the need for more frequent trimming. As part of this approach, some trees will be removed from areas we have not cleared in the recent past.
- Crews will be working in the utility easements to remove or trim trees that have the potential to make contact with the lines and/or may affect their safe operation and maintenance.
- Though this work will take place in the utilities' easements, there are some areas where it will be necessary for crews to cross a portion of some yards to access the work area. In some of these locations, we will need to temporarily remove fences and install temporary matting to provide a stable path for construction vehicles and to minimize the potential for rutting.



PPL companies

- An on-site crew member will communicate with property owners whose yards will need to be crossed or whose fences will need to be removed. These crew members will be happy to discuss any concerns you have and/or consider reasonable accommodations before starting the work in your area. Once the work in the area is completed, we will take steps to replace the fences and restore property to its current – or better – condition.
- Along with other infrastructure upgrades being conducted by the utility, these efforts are expected to reduce the frequency and duration of outages experienced by customers, reduce the associated costs and ensure a safe, reliable system far into the future.
- Other enhancements currently underway across KU's high-voltage transmission system include replacing aging equipment such as wooden poles, cross arms, insulators, lines and substation controls; and installing smart restoration-detection equipment.
- The safety of the general public, as well as our employees and crews working on our behalf is our top priority.
- Crews working in the project areas will be using heavy equipment, such as backhoes, cranes and specialized tree removal equipment.
- There may be times when equipment will be left in the area overnight and on weekends. We ask that you keep children and pets away from the work area and any equipment that may remain on site during the project.
- In addition, we ask that you be mindful of our crews' presence as you drive through the area over the coming weeks.
- For your awareness and safety, our employees and contractors drive vehicles marked with the LG&E and KU logo.
- Prior to beginning this work, letters communicating details of the project are being sent to property owners within the project areas. Details of the work are also being communicated to area representatives.

In addition, company representatives dedicated to the project are making personal visits to owners of properties along the project route to discuss the work to be done and any concerns or further arrangements necessary in advance of the work.

- While this tree removal and trimming work is a critical part of maintaining the system, LG&E and KU are committed to enhancing the environment and landscape across the communities we serve.
  - More than 50,000 trees have been planted across the LG&E and KU service territories as part of the company's Plant for the Planet Grant program;



- Since 1981, the company has donated more than 760,000 tree seedlings for planting across the service territories through its annual tree seedling giveaways;
- And the company has contributed more than \$325,000 to tree planting efforts across the state.

**Tactics (Timing TBD):**

*Internal*

- CUSTOMER EXPERIENCE webpage talking points
- TARGETED EMAIL - to be sent to employees who live/work within the identified work area(s)
- TALKING POINTS - Media Relations/Customer/Business Service/Customer Experience

*External*

- DEDICATED PHONE AND EMAIL ADDRESS – (to use new IVR set up established)
- BROCHURES (single utility)– containing project details and Q&A of commonly asked questions
- LETTERS (single utility) - w/brochure and contact info referenced above, to customers who live along the route of the project
- DOOR HANGERS (single utility)– to be considered for leaving in all urban/suburban neighborhoods impacted
- STAKEHOLDER NOTIFICATIONS (to use established talking points)
  - Lexington/Fayette Urban County Government
  - Pinnacle Homeowners Association
  - Southpoint Neighborhood Association
- TARGETED CUSTOMER COMMITMENT WORK – (as needed) to address potential inquiries/complaints
- MEDIA – (as necessary/if media inquiries are received)

**Project/Project Communications Timing (Tentative)**

**Week of:**

- 5/25 – Send targeted email to employees along first phase route for awareness
- 5/25 – External stakeholder notifications



**PPL companies**

- 5/25 – Letter(s) to affected property owners and residents along and around project route (brochure attached for those along route, project web page and contact info provided)
- 6/1 – (Door knocking/Property visits)
- 6/8 – Project begins



**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 48**

**Responding Witness: Lonnie E. Bellar**

Q-48. Please refer to the KU Response to LFUCG 1-85.

- (a) How much was spent on transmission vegetation management within Fayette County for each year between 2017 – 2020?
- (b) How much does removing a tree cost on average?
- (c) Do you pay a set cost regardless of type of tree or different cost depending on the type of tree?

A-48.

- (a) KU does not track transmission vegetation management costs by county. Please see response to Question No. 1-92(a).
- (b) There are a number of factors that impact the cost of removing trees, with location and tree size being two of the primary variables. The range of costs typically vary from approximately \$40 per tree up to \$700 or greater depending on the specific situation.
- (c) The removal work is performed using competitively bid labor and equipment rates independent of the type of tree.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 49**

**Responding Witness: Lonnie E. Bellar**

- Q-49. Refer to Response to LFUCG 1-86. Provide a true-scale map of Fayette County (or larger geographical area) identifying KU's transmission-line corridors and distinguishing between transmission-line corridors that have been cleared under the current five-year plan and transmission-line corridors that have not been cleared under the current five-year plan.
- A-49. See attached. The information requested is confidential and proprietary and is being provided under seal pursuant to a petition for confidential protection.

The entire attachment is  
Confidential and  
provided separately  
under seal.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 50**

**Responding Witness: John K. Wolfe**

Q-50. Please refer to the KU Response to LFUCG 1-87(a), referring to Distribution Vegetation Management Plan provided in response to DR 1-83(a), page 4 "Routine Trimming Cycle Plan" and "Mid-Cycle Touch up Plan."

- (a) How often is the same circuit, on average, trimmed?
- (b) Do only circuits with "fast growing and hazard trees" get a mid-cycle touch up?
- (c) How does the Company determine what are "fast growing and hazard trees"?

A-50.

- (a) KU maintains its commitment to a <5-year average trim cycle on its distribution circuits through its routine line clearing program. KU doesn't include the contribution of vegetation management performed through its Hazard Tree, mid-cycle, and capital programs or storm work in its five-year calculation because associated work only targets a subset of individual circuits and trees and is too difficult to attribute to individual circuit averages.
- (b) KU performs mid-cycle trimming on circuits only where fast growing and hazard trees are contributing to unsatisfactory reliability performance or presenting imminent risks to system integrity and reliability.
- (c) KU arborists physically inspect vegetation in proximity to its overhead electric system when developing routine and mid-cycle vegetation management plans. Through these system inspections, arborists identify and document trees that are fast growing based on their species and growth pattern. Fast growing trees are targeted for mid-cycle trimming whenever actual or projected growth rates and patterns present a risk to system integrity and reliability. KU arborists also identify and document a tree to be a "hazard" when it is discovered to be predisposed to failure due to disease, structure, death, declining condition or soil conditions, and where potential exists for contact with a conductor or electric equipment if the tree or a limb from the tree falls.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 51**

**Responding Witness: Lonnie E. Bellar**

Q-51. Please refer to the KU Response to LFUCG 1-98(a). Please attach a copy of the easements “expressly granting KU the right to trim or remove such trees” in Southpoint Drive. Additionally, please attach copies of all easements KU has for Lansdowne Drive.

A-51. See attached.

BOOK 455 PAGE 132

# TRANSMISSION LINE EASEMENT HIGBY MILL TO RICHMOND LINE

COPIES PREPARED
11-23-49 mcg.
W. C. GIBSON

The undersigned, H. E. COONS

and ETHEL COONS, his wife

of Fayette County, Kentucky, for and in consideration of the sum of Ten Dollars (\$10.00) cash receipt of which is hereby acknowledged, do hereby grant and convey unto KENTUCKY UTILITIES COMPANY, a Kentucky Corporation, its successors, assigns and lessees (hereinafter collectively referred to as the Company), for a period of two years and for such time thereafter as any electric transmission line may be maintained by the Company across the lands hereinafter described, the right, power and privilege to construct, inspect, maintain, operate, enlarge, rebuild and repair a transmission line for transmission of electric energy and all appurtenances thereto, along and upon the right of way hereinafter described; together with the right of ingress and egress over the lands of the undersigned to and from said lines in the exercise of the rights and privileges herein granted; provided, however, that in exercising such rights of ingress and egress, the Company will, whenever practicable to do so, use regularly established highways or farm roads.

As a part of the above consideration, the undersigned hereby grant to the Company the further right to cut down any and all trees located on the right of way described herein, and any and all other trees which are of such height that, in falling directly to the ground, they would come in contact with said wires; also the right to remove brush and all other obstructions and obstacles from the right of way which would create a fire hazard to the lines of the Company.

As a further consideration the Company agrees to pay to the undersigned, before installation, the sum of Twenty-Five Dollars (\$25.00) for each pole and Twenty-Five (\$25.00) for each anchor guy installed on the property of the undersigned, described in this easement, and in addition thereto One Dollar (\$1.00) for each linear rod this easement extends across said property.

The undersigned, their successors, heirs or assigns, are fully to use and enjoy the lands crossed by this easement, except, however, that such use shall not conflict with any of the rights and privileges herein granted.

The lands belonging to the undersigned over which this easement is granted are situated in the County of Fayette, State of Kentucky, and contain approximately 579 acres, situated on the Tates Creek road about five miles from the Town of Lexington, being the same property ~~conveyed to~~ <sup>conveying</sup> 9/12 of title by deed from Jociah Coons and Mary E. Coons, his wife, dated October 8, 1934, recorded in County Court Clerk's Office of Fayette County by deed from in Deed Book 283, Page 499, and also in Jessamine Co. Court Clerk's Office in Deed Book 32, page 598. Also by deed from Jociah Coons, et al., transferring 3/12 dated of title day of February, 1918 and recorded in Deed Book 190, Page 21, in the office of the Clerk of the County Court of Fayette County, Kentucky, to which reference is hereby specifically made for the description therein contained.

- 4 -  
Wilson Downing Jap

The specific right of way upon which said transmission line shall be located is 150 feet wide and the center line thereof is described as follows:

BEGINNING at a point in the line between the lands of the undersigned above described and the lands of Florence R. McCaw, which point is about 500' SW of a corner to... running thence the undersigned and Florence McCaw, running thence South 52° East for a distance of approximately 3200' to a point in the line between the lines of the undersigned and Dulaney Logan.

It is further expressly understood and agreed that the Company will pay to the undersigned any and all damage that may be caused by the Company in going upon said lands and right of way, except that the Company will not be liable for any damage for cutting down trees in the manner and to the extent herein above specified.

IN WITNESS WHEREOF, the undersigned have hereunto set their hands this

26<sup>th</sup> day of OCTOBER, 1948.

Witnesses

R. H. McBeath  
R. C. Bennett

H. E. Coons  
Ethel Coons

STATE OF KENTUCKY

COUNTY OF Fayette, Sct.

I, J. Porter Land, Clerk of the County and State, aforesaid, hereby certify that the foregoing instrument of writing was on this day produced to me in my office, by R. H. McBeath, one of the subscribing witnesses thereto, who also proved the signature of R. C. Bennett, the other subscribing witness and on oath testified that H. E. Coons and Ethel Coons did sign the foregoing instrument in their presence and acknowledged the same to be their act and deed.

Witness my hand this 10<sup>th</sup> day of February, 1949.

J. Porter Land, Clerk  
By R. R. Redford, D.C.

STATE OF KENTUCKY

COUNTY OF \_\_\_\_\_, Sct.

I, \_\_\_\_\_, Clerk of the State and County aforesaid, certify that the foregoing instrument of writing was on this day lodged for record in my Office, and I have recorded it and this and the foregoing certificate in my said Office in Deed Book \_\_\_\_\_, page \_\_\_\_\_.

Witness my hand this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_.

ORDERED TO RECORD

AT 2:15 P.M. 10 DAY OF Feb 1949

J. PORTER LAND, CLK.

BY R. R. Redford, D.C.

J. F. Paid \$5.50

\_\_\_\_\_, Clerk

By \_\_\_\_\_, D.C.

47550  
PAGE 100

455 132  
Cooks, H. E., et al

To: Pole Line Agreement

Ky. Utilities Co.

State of Kentucky }  
County of Fayette } sct

I, J. Porter Land, Clerk of said  
County Court hereby certify  
that the foregoing instrument  
has been duly recorded in

~~Book~~ Book 455 Page 132

in my said office.

*J. Porter Land*  
Clerk Fayette County Court



BOOK 469 PAGE 126

TRANSMISSION LINE EASEMENT  
HIGBY MILL TO RICHMOND

(1)

The undersigned, MRS. N. R. HILLARD, a widow, ANDREW D. HILLARD, JASPER V. HILLARD, BESSIE NEAL, a widow, EDNA RAILEY all of Fayette County, Kentucky, GEORGE W. HILLARD, JOSEPH N. HILLARD, both of Jefferson County, Kentucky, CLARENCE RAY HILLARD of Oldham County, Kentucky, and WILLIAM G. HILLARD and CHARLES E. HILLARD of *Baldwin* County, Alabama, for and in consideration of the sum of Six Hundred Dollars (\$600.00) cash receipt of which is hereby acknowledged, do hereby grant and convey unto KENTUCKY UTILITIES COMPANY, a Kentucky Corporation, its successors, assigns and lessees (hereinafter collectively referred to as the Company), for a period of two years and for such time thereafter as any electric transmission line may be maintained by the Company across the lands hereinafter described, the right, power and privilege to construct, inspect, maintain, operate, enlarge, rebuild and repair a transmission line for transmission of electric energy, along and upon the right of way hereinafter described; together with the right of ingress and egress over the lands of the undersigned to and from said lines in the exercise of the rights and privileges herein granted; provided, however, that in exercising such rights of ingress and egress, the Company will, whenever practicable to do so, use regularly established highways or farm roads.

As a part of the above consideration, the undersigned hereby grants to the Company the further right to cut down any and all trees located on the right of way described herein, or within 75 feet of the center line of transmission line as located upon the property of the undersigned and upon the property of Florence R. McCaw, and any and all other trees which are of such height that, in falling directly to the ground, they would come in contact with said wires; also the right to remove brush and all other obstructions and obstacles from the right of way which would create a fire hazard to the lines of the Company. All timber and undergrowth thus removed will be cut as close to ground line as practical and limbs and brush will be hauled to another location on the property as agreed upon.

BOOK 469 PAGE 127

(2)

The undersigned, their successors, heirs or assigns, are fully to use and enjoy the lands crossed by this easement, except, however, that such use shall not conflict with any of the rights and privileges herein granted.

The lands belonging to the undersigned over which this easement is granted are situated in the County of Fayette, State of Kentucky, and contain approximately 6 1/2 acres, situated on the Nicholasville road about five miles from the Town of Lexington, being the same property conveyed to N. R. HILLARD by deed from R. V. BIGGERSTAFF dated February 18, 1918, and recorded in Deed Book 187, page 522; also by deed to MRS. ANNIE HILLARD (Mrs. N. R. Hillard) from the heirs of N. R. Hillard dated May 17, 1934, and recorded in Deed Book 281, page 290. N. R. HILLARD died intestate in Fayette County on May 9, 1934, see Affidavit of Descent dated May 17, 1934, and recorded in Deed Book 281, page 292, all in the office of the Clerk of the County Court of Fayette County, Kentucky, to which reference is hereby specifically made for the description therein contained.

The area enclosed by the right of way for said transmission line is described as beginning at a point about 440 feet east from the center line of the old highway U.S. #27; running thence about South 71 East with the property line of Florence R. McCaw a distance of approximately 300 feet; thence North 74 West with the property line of said McCaw a distance of approximately 260 feet; thence North 52 1/4 West approximately 42 feet to the beginning. The center line of said transmission line is specifically described as beginning at a point in the North boundary line of the property of the undersigned at a distance of about 680 feet from the center line of the old highway U.S. #25 and running thence South 52 1/4 East a distance of 11 feet to the South boundary line of the property of the undersigned.

It is further expressly understood and agreed that the Company will pay to the undersigned any and all damage that may be caused by the Company in going upon said lands and right of way, except that the Company will not be liable for any damage for cutting down trees in the manner and to the extent herein above specified. All fences will be repaired in a satisfactory manner.

(3)

BOOK 469 PAGE 128 IN WITNESS WHEREOF, the undersigned have hereunto set their hands  
this 8<sup>th</sup> day of SEPTEMBER, 1949.

Mrs. N. R. Hillard

Andrew D. Hillard

Jasper V. Hillard

Bessie Neal

Edna Railey

George W. Hillard

Joseph R. Hillard

Charles B. Hillard

Wm. G. Hillard

Char. E. Hillard

STATE OF KENTUCKY  
COUNTY OF FAYETTE

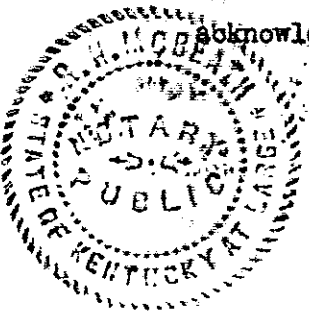
I, R. H. McBEATH, a Notary Public in and for the State  
of Kentucky at Large, do hereby certify that the foregoing instrument in  
writing was this day produced before me in said County by Mrs. N. R. Hillard a widow,  
ANDREW D. HILLARD, JASPER V. HILLARD, BESSIE NEAL, a widow,  
EDNA RAILEY, AND GEORGE W. HILLARD, and

acknowledged and delivered by them to be their act and deed.

My commission will expire on the 15th day of May, 1951.

WITNESS my hand this 8<sup>th</sup> day of SEPT, 1949.

R. H. McBeath  
Notary Public for the State of  
Kentucky at Large



(4)

STATE OF KENTUCKY

COUNTY OF JEFFERSON

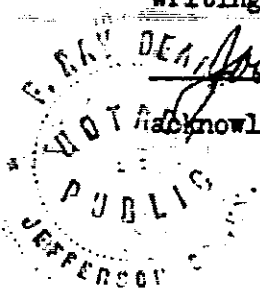
I, F. Ray Neane, a Notary Public in and for the State and County aforesaid, do hereby certify that the foregoing instrument in writing was this day produced before me in said County by \_\_\_\_\_

Joseph N. Hillard, and acknowledged and delivered by him to his act and deed.

My commission will expire on the 13<sup>th</sup> day of Nov., 1950

WITNESS my hand this 18<sup>th</sup> day of September, 191949.

F. Ray Neane  
Notary Public, Jefferson County, Ky.



AGG REFILED 200

STATE OF KENTUCKY

COUNTY OF OLDHAM

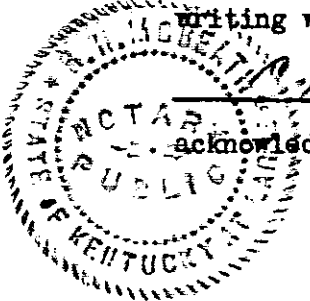
I, R. H. McBeath, a Notary Public in and for the State and County aforesaid, do hereby certify that the foregoing instrument in writing was this day produced before me in said County by \_\_\_\_\_

LARENCE R. HILLARD, and acknowledged and delivered by him to be his act and deed.

My commission will expire on the 15<sup>th</sup> day of MAY, 1951.

WITNESS my hand this 18<sup>th</sup> day of SEPT, 1949.

R. H. McBeath  
Notary Public, ~~Oldham County, Ky.~~  
for the State of Kentucky at Large.



STATE OF ALABAMA

COUNTY OF Baldwin

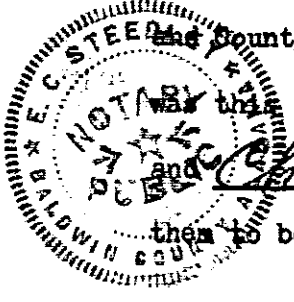
I, C. C. Studley, a Notary Public in and for the State and County aforesaid, do hereby certify that the foregoing instrument in writing was this day produced before me in said County by \_\_\_\_\_

Wm H Hillard and Charles E. Hillard, and acknowledged and delivered by them to be their act and deed.

My commission will expire on the 31 day of Jan, 1960.

WITNESS my hand this 13 day of September, 1949.

C. C. Studley  
Notary Public Baldwin County, Ala.



BOOK 404 PAGE 7

**TRANSMISSION LINE EASEMENT**  
**HIGBY MILL TO RICHMOND LINE**

11-23-00  
Kits/Wife/

The undersigned, FLORENCE R. McCAW

and W. R. McCAW, her husband,

of Fayette County, Kentucky, for and in consideration of the sum of Ten Dollars (\$10.00) cash receipt of which is hereby acknowledged, do hereby grant and convey unto KENTUCKY UTILITIES COMPANY, a Kentucky Corporation, its successors, assigns and lessees (hereinafter collectively referred to as the Company), for a period of two years and for such time thereafter as any electric transmission line may be maintained by the Company across the lands hereinafter described, the right, power and privilege to construct, inspect, maintain, operate, enlarge, rebuild and repair a transmission line for transmission of electric energy and all appurtenances thereto, along and upon the right of way hereinafter described; together with the right of ingress and egress over the lands of the undersigned to and from said lines in the exercise of the rights and privileges herein granted; provided, however, that in exercising such rights of ingress and egress, the Company will, whenever practicable to do so, use regularly established highways or farm roads.

As a part of the above consideration, the undersigned hereby grant to the Company the further right to cut down any and all trees located on the right of way described herein, and any and all other trees which are of such height that, in falling directly to the ground, they would come in contact with said wires; also the right to remove brush and all other obstructions and obstacles from the right of way which would create a fire hazard to the lines of the Company.

As a further consideration the Company agrees to pay to the undersigned, before installation, the sum of Twenty-Five Dollars (\$25.00) for each pole and Twenty-Five (\$25.00) for each anchor guy installed on the property of the undersigned, described in this easement, and in addition thereto One Dollar (\$1.00) for each linear rod this easement extends across said property.

Only 14 poles are to be installed on this property and at locations  
agreed upon. No guys.

The undersigned, their successors, heirs or assigns, are fully to use and enjoy the lands crossed by this easement, except, however, that such use shall not conflict with any of the rights and privileges herein granted.

The lands belonging to the undersigned over which this easement is granted are situated in the County of Fayette, State of Kentucky, and contain approximately 270 acres, situated on the Nicholasville road about seven miles from the Town of Lexington, being the same property conveyed to Florence R. McCaw, by deed

from William R. Roberts, dated December 17, 1932, recorded in Deed Book 279, page 352, and from R. L. Saunders, Commissioner, by deed dated November 14, 1935, and recorded in Deed Book 280, page 134 by deed in the office of Fayette County Court Clerk. Also conveyed to Florence R. McCaw (then Florence R. Wooten) by Commissioner Deed of W. W. Quinn, Jr. dated February, 1927, and recorded in Deed Book 39, page 428, in County Court Clerk's Office of Jessamine County and by deed of G. W. Lyne dated 20th

day of September, 1929

and recorded in Deed Book 41, Page 572, in the office of the Clerk of the County Court of Jessamine County, Kentucky, to which reference is hereby specifically made for the description therein contained.

BOOK 454 PAGE 8

The specific right of way upon which said transmission line shall be located is 150 feet wide and the center line thereof is described as follows:

BEGINNING at a point in the line between the lands of the undersigned and Mrs. N. R. Hillard, running thence about South 52 degrees East for a distance of 440 feet; thence about South 50 degrees East for a distance of 200 Feet to the property line of Mrs. N. R. Hillard; thence beginning again on the south side of the said Hillard property and continuing in the same direction for a distance of approximately 4050 feet to a point in the line between the lands of the undersigned and H. E. Coons. This easement supersedes and makes void an easement executed by the Undersigned on November 15, 1949, and recorded in Deed Book 455, page 130, in the Office of the County Court Clerk of Fayette County.

It is further expressly understood and agreed that the Company will pay to the undersigned any and all damage that may be caused by the Company in going upon said lands and right of way, except that the Company will not be liable for any damage for cutting down trees in the manner and to the extent herein above specified.

IN WITNESS WHEREOF, the undersigned have hereunto set their hands this

26th day of July 1949

Witnesses

Florence R. McCaw
W. R. McCaw

STATE OF KENTUCKY

COUNTY OF FAYETTE, Sct.

I, R. H. McBeath, a Notary Public for the State of Kentucky at Large, do hereby certify that the foregoing instrument of writing was on this day produced to me in my office, by

Florence R. McCaw and W. R. McCaw, her husband, and they did sign the foregoing instrument in my presence and acknowledged the same to be their act and deed.

Witness my hand this 26th day of July 1949
My Commission expires on May 15, 1951

R. H. McBeath
Notary Public for the State of Kentucky at Large

STATE OF KENTUCKY

COUNTY OF FAYETTE, Sct.

I, J. Porter Land, Clerk of said County Court hereby certify that the foregoing instrument of writing was on this day produced to me in my office, by

recorded it and this and the foregoing certificate in my said office in Deed Book 454, page 130, in my said office.

Witness my hand this day of

State of Kentucky set
County of Fayette
I, J. Porter Land, Clerk of said County Court hereby certify that the foregoing instrument has been duly recorded in Deed Book 454, Page 130 in my said office.

J. Porter Land
Clerk Fayette County Court

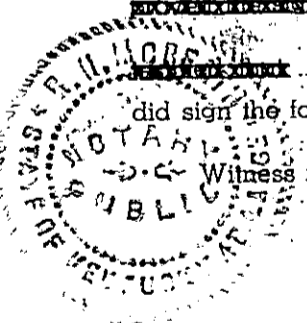
RECORDED TO RECORD

12:40 PM 4 DAY OF Aug 19 49
ER LAND, CLK.

BY Joe Rodes D.C.

Handwritten notes: Florence R. Hillard, Esq. 464

Handwritten initials: J.P.



H. C. DOWNING,

TRANSMISSION LINE EASEMENT

.....  
.....

3

In consideration of the sum of \$10.00....(Ten dollars)....and other good and valuable consideration paid to the undersigned by the Lexington Utilities Company, a corporation, the receipt of which consideration is hereby acknowledged, the undersigned doe hereby grant and convey unto said Lexington Utilities Company, its successors and assigns, (hereinafter collectively referred to as the Company) for a period of one year and for such time thereafter as any electric transmission lines or any extensions thereof may be maintained by the Company across anypart of lands hereinafter described; the right, power and privilege to erect, inspect, maintain, operate, rebuild and repair a transmission line or lines of the Company used in connection with said transmission system; together with the right to haul across any of said land material to be used in connection with the construction, maintenance and operation of said transmission lines.

The lands belonging to the undersigned over which this easement is granted are situated in the County of ...Fayette..., State of Kentucky and are described as follows: About 1/4 of a mile east of the Nicholasville Pike on the Downing-Wilson Pike and this easement survey covers the only land pver which passage is granted and is described as follows: Beginning at a point on the property line of C.B.Wilson and the undersigned Kentucky Hydro Electric Sta. 936-02 of a transmission line survey of the Dix River-Lexington Line; thence north 28 degrees 11 minutes east 2204 feet to Ky. Hydro Electric Sta. 958-06 the property of Arch Hamilton and the undersigned.

being the same property conveyed to the.....by deed from.....dated the.....day of ....., ..... and recorded in Deed Book .....page.....in the office of the Clerk of the County Court of.....County, Kentucky, to which reference is hereby specifically made for the description therein contained.

within

Such transmission lines shall be located/fifty (50) feet of the center line of right-of-way, which center line is described as follows:

Beginning at a point on the property line of C. B. Wilson and the undersigned Kentucky Hydro Electric Sta. 936-02 of a transmission line survey of the Dix-River-Lexington Line; thence north 28 degrees 11 minutes east 2204 feet to Kentucky Hydro Electric Sta. 958-06 the property of Arch Hamilton and the undersigned.

Deed  
Clerk

The undersigned further grant unto the Company the right, power and privilege to trim or remove any trees, brush or branches now or hereafter growing within fifty (50) feet of the center line above described insofar as it may be reasonably necessary to prevent interference with the wires, towers and appliances constituting and used in connection with said transmission lines.

IT IS EXPRESSLY UNDERSTOOD, however, that the right herein granted to the Company to haul material as hereinabove set out shall be exercised only in the event that the transmission lines are so inaccessible as to make it impracticable to do such hauling over regularly established highways.

"2"

IS FURTHER EXPRESSLY UNDERSTOOD AND AGREED that the Company will pay to the undersigned any and all damages that may be caused to fences, crops, animals and other property of the undersigned by the Company in exercising any of the rights granted under this easement or in arising from the use by it of any of the property of the undersigned hereinabove described.

IN WITNESS WHEREOF the undersigned have hereunto set their hand this 17<sup>th</sup> day of April 1924.

*H.C. Downing*

*Daisy Downing*

STATE OF KENTUCKY

COUNTY OF *Fayette*

I *Roy Forman* a Notary Public in and for the State and County aforesaid do hereby certify that the foregoing instrument in writing was this day produced before me in said County by *H.C. Downing* and *Daisy Downing* and acknowledged by them to be their act and deed and delivered

My commission will expire on the 21<sup>st</sup> day of August 1927

WITNESS my hand this 17<sup>th</sup> day of April 1924.

*Roy Forman*

Notary Public *Fayette* County, Kentucky

I, FAUST FOUSHEE, Clerk of the County Court of Fayette County, in the State of Kentucky, do hereby certify that on this day the foregoing instrument of writing from H. C. Downing and Daisy Downing to Lexington Utilities Company

was produced to me in my office, and ~~was~~ ordered to record: Wherefore the same with certificate thereon endorsed and this my certificate has been duly recorded in my office.

part thereto to be act and deed

Witness my hand this 7 day of May 1925

*Faust Foushee* Clerk  
*By J.P. Amshaw* D. C.



H. EWING HALL

TRANSMISSION LINE EASEMENT.

④

.....

In consideration of the sum of \$875.00 and other good and valuable consideration paid to the undersigned by the Lexington Utilities Company, a corporation, the receipt of which consideration is hereby acknowledged, the undersigned do hereby grant and convey unto said Lexington Utilities Company, its successors and assigns, (hereinafter collectively referred to as the Company) for a period of one year and for such time thereafter as any electric transmission lines or any extensions thereof may be maintained by the Company across the lands hereinafter described; the right, power and privilege to erect, inspect, maintain, operate, rebuild and repair a transmission line or lines of the Company used in connection with said transmission system; together with the right to haul across any necessary portion of said lands, material to be used in connection with the construction, maintenance and operation of said transmission lines.

The lands belonging to the undersigned over which this easement is granted are situated in the County of Fayette, State of Kentucky, and are described as follows:

"Located on the Nicholasville Pike about three and one-half miles from Lexington and adjacent to the farms of Chilton Downing, A. L. Hamilton and M. G. Swope,

being the same property devised to Lula B. Hall under the will of Nat F. Berry dated the            day of            and recorded in Will Book            page            in the office of the Clerk of County Court of Fayette County, Kentucky, to which reference is hereby specifically made for the description therein contained.

Provided such transmission lines shall be located and maintained only within fifty (50) feet of the center line of the right-of-way, which center line is described as follows:

Beginning at a point on the property line of Arch Hamilton and the undersigned, Station 1006-33 of a transmission line survey of the Dix River-Lexington Line; thence north 65 degrees 42 minutes east 2814 feet to Station 1034-47, the property line of Mattie Gay Swope and the undersigned, as shown by plat on file in Fayette County Clerk's office.

The undersigned further grant unto the Company, the right, power and privilege to trim or remove any trees, brush or branches now or hereafter growing within fifty (50) feet to the center line above described insofar as it may be reasonably necessary to prevent interference with the wires, towers and appliances constituting and used in connection with said transmission lines.

-2-

Any trees that are required to be trimmed or cut down under and by virtue of the right herein granted, either in the original construction of said transmission line or hereafter, shall remain and be the property of the undersigned, and the Company agrees to cut and work up the wood or timber therefrom, as undersigned may direct or request, and to clean up and haul the same, within thirty (30) days after being cut, to some place on the lands of the undersigned, such place to be designated by undersigned.

IT IS EXPRESSLY UNDERSTOOD, however, that the right herein granted to the Company to haul material as hereinabove set out shall be exercised only in the event that the transmission lines are so inaccessible as to make it impracticable to do such hauling over regularly established highways, and the undersigned shall have the right to designate the route to be taken by the company in exercising this right to haul over said lands.

IT IS FURTHER EXPRESSLY UNDERSTOOD AND AGREED that the Company will pay to the undersigned any and all damage that may be caused to fences, crops, animals or other property of the undersigned by the Company in exercising any of the rights granted under this easement or in arising from the use by it of any of the property of the undersigned hereinabove described, said damage to be settled within fifteen days from the doing of the damage.

IT IS FURTHER UNDERSTOOD AND AGREED that no division or other fence, shall be cut or torn down by the Company at any time. *Only structures located as shown upon said map or plat shall be placed upon said lands*  
 IN WITNESS WHEREOF the undersigned ha hereunto set hand this 6th day of October, 1924.

*Mrs. H. Ewing Hall*  
 \_\_\_\_\_  
*H. Ewing Hall*

STATE OF KENTUCKY,  
 Sect.  
 COUNTY OF FAYETTE,

I, Daisy W. Hays, a notary public in and for the State and County aforesaid, do hereby certify that the foregoing instrument of writing was this day produced before me in said County by *Mrs. H. Ewing Hall* and *H. Ewing Hall* and acknowledged and delivered by them to be their act and deed.

My commission as notary public is in full force and effect and does not expire until 21st day of January, 1926.

Witness my hand this 6th day of October, 1924.

*Daisy W. Hays*  
 \_\_\_\_\_  
 Notary Public, Fayette County, Ky.

Case No. 2020-00349  
Question No. 51 Att. 2  
Page 5 of 14  
Bellar

FRUST FOUSHEE, Clerk of the County Court of Fayette County, in the State of Kentucky, do

certify that on this day the foregoing instrument of writing from -----

H. Ewing Hall and H. Ewing Hall -----

Lexington Utilities Company -----

was produced to me in my office, and ~~was acknowledged by~~ ordered to record: Wherefore

the same with certificate thereon endorsed and this my certificate -----

has been duly recorded in my office. -----

-----

----- ~~per~~ the ~~act~~ to be ~~XX~~ ----- act and ~~need~~

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Witness my hand this 7 day of May 1925

*Frust Foushee* ----- Clerk

*By J. P. Beaman* ----- D. C.

TRANSMISSION LINE EASEMENT

\*\*\*\*\*

✓ In consideration of the sum of \$\_\_\_\_\_ and other good and valuable consideration paid to the undersigned by the Lexington Utilities Company, a corporation, the receipt of which consideration is hereby acknowledged, the undersigned do hereby grant and convey unto said Lexington Utilities Company, its successors and assigns, (hereinafter collectively referred to as the Company) for a period of one year and for such time thereafter as any electric transmission lines or any extensions thereof may be maintained by the Company across any part of lands hereinafter described; the right, power and privilege to erect, inspect, maintain, operate, rebuild and repair a transmission line or lines of the Company used in connection with said transmission system; together with the right to haul across any of said lands material to be used in connection with the construction, maintenance and operation of said transmission lines.

The lands belonging to the undersigned over which this easement is granted are situated in the County of Fayette, State of Kentucky, and are described as follows:

Located about four miles from Lexington on the Tates Creek Pike and adjoining the lands of Lula B. Hall and H.C. Downing, being the same property conveyed to the \_\_\_\_\_ by deed from \_\_\_\_\_ dated the \_\_\_\_\_ day of \_\_\_\_\_ and recorded in Deed Book \_\_\_\_\_ page \_\_\_\_\_ in the office of the Clerk of the County Court of \_\_\_\_\_ County, Kentucky, to which reference is hereby specifically made for the description therein contained.

Such transmission lines shall be located within fifty (50) feet of the center line of right-of-way, which center line is described as follows:

Beginning at a point on the property line of H.C. Downing and Arch L. Hamilton, station 958-06 of a transmission line survey of the Dix River-Lexington Line which point is more specifically located as being 809 feet from the corner post of the land line between C.G. Shely and Arch L. Hamilton, the bearing

DB  
232-130

Attachment to Response to LFUCG-2 Question No. 51 Att. 2  
of this point being north 0 degrees 0 minutes west from said corner; thence  
Page 7 of 11  
north 28 degrees 11 minutes east 2500 feet to station 983-06 equal 1003-86, thence  
north 65 degrees 42 minutes east to station 1006-33 a distance of 247 feet the  
property line of Arch L. Hamilton and Ewing Hall

The undersigned further grant unto the Company, the right, power and  
privilege to trim or remove any trees, brush or branches now or hereafter  
growing within fifty (50) feet of the center line above described insofar as  
it may be reasonably necessary to prevent interference with the wires, towers and  
appliances constituting and used in connection with said transmission lines.

IT IS EXPRESSLY UNDERSTOOD, however, that the right herein granted  
to the Company to haul material as hereinabove set out shall be exercised only  
in the event that the transmission lines are so inaccessible as to make it  
impracticable to do such hauling over regularly established highways.

IT IS FURTHER EXPRESSLY UNDERSTOOD AND AGREED that the Company will  
pay to the undersigned any and all damages that may be caused to fences, crops,  
animals or other property of the undersigned by the Company in exercising any of  
the rights granted under this easement or in arising from the use by it of any  
of the property of the undersigned hereinabove described;

IN WITNESS WHEREOF the undersigned has hereunto set their hand this  
12 day of Nov. 1924.

Arch L. Hamilton

Edna Gilbert Hamilton

I, \_\_\_\_\_ a Notary Public in and for the State and County aforesaid, do hereby certify that the foregoing instrument in writing was this day produced before me in said County by \_\_\_\_\_ and \_\_\_\_\_ and \_\_\_\_\_ acknowledged and delivered by them to be their act and deed.

My commission will expire on the 29th day of December 1925

WITNESS my hand this 12 day of Nov 1924.

(SEAL)

Gilbert C. Caden  
Notary Public Jefferson County, Ky

STATE OF KENTUCKY

COUNTY OF FAYETTE

I, B.C. Jones a Notary Public in and for the State and County aforesaid do hereby certify that the foregoing instrument in writing was this day produced before me in said County by \_\_\_\_\_ and \_\_\_\_\_ and acknowledged and delivered by them to be their act and deed.

My commission will expire on the 1st day of Jany. 1925.

WITNESS my hand this 9th day of Dec 1924.

(SEAL)

B.C. Jones  
Notary Public Fayette County, Ky

I, FAUST FOUSHEE, Clerk of the County Court of Fayette County in the State of Kentucky, do hereby certify that on this day the foregoing instrument of writing from Arch L. Hamilton and Edna Gilbert Hamilton to Lexington Utilities Company was produced to me in my office, and ordered to record. Wherefore the same, the foregoing certificates and this certificate have been duly recorded in my office.

Witness my hand this 6th day of July 1925.

Faust Foushee Clerk

D-123

TRANSMISSION LINE EASEMENT

L. R. KELLY

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6

In consideration of the sum of \$ *Five (100) Dollars*.....and other good and valuable consideration paid to the undersigned by the Lexington Utilities Company, a corporation, the receipt of which consideration is hereby acknowledged, the undersigned do hereby grant and convey unto said Lexington Utilities Company, its successors and assigns, (hereinafter collectively referred to as the Company) for a period of one year and for such time thereafter as any electric transmission lines or any extensions thereof may be maintained by the Company across any part of the lands hereinafter described, the right, power and privilege to erect, inspect, maintain, operate, rebuild and repair a transmission line or lines of the Company used in connection with said transmission system ; together with the right to haul across any of said lands material to be used in connection with the construction, maintenance and operation of said transmission lines.

The lands belonging to the undersigned over which this easement is granted are situated in the County of *Tazewell*, State of Kentucky and are described as follows: *about 1/2 mile on the Bates Creek Pike*

being the same property conveyed to the .....by deed from....., dated the .....day of ..... and recorded in Deed Book .....Page..... in the office of the Clerk of the County Court of ..... County, Kentucky to which reference is hereby specifically made for the description therein contained.

Such transmission lines shall be located within fifty (50) feet of the center line of the right-of-way which center line is described as follows:

*Survey*  
Beginning at a point in the center line of the Bates' Creek Pike, the property line of Mrs. Mattie Gay Swope and the undersigned, Kentucky Hydro-Electric Station 1047+50 of a transmission line survey of Dix River-Lexington Line thence North 65 degrees 42 minutes East 571 feet to Ky. Hydro-Electric Station, 1053+21 thence North 64 degrees 14 minutes East 2,834 feet to a point on the property line of C.W. Hardman and the undersigned. Ky. Hydro-Electric Station 1081-55.

The undersigned further grant unto the Company, the right, power and privilege to trim or remove any trees, brush or branches now or hereafter growing within fifty (50) feet of the center line above described insofar as it may be reasonably necessary to prevent interference with the wires, towers and appliances constituting and used in connection with said transmission lines.

IT IS EXPRESSLY UNDERSTOOD, however, that the right herein granted to the Company to haul material as hereinabove set out shall be exercised only in the event that the transmission lines are so inaccessible as to make it impracticable to do such hauling over regularly established highways.

"2"

IT IS FURTHER EXPRESSLY UNDERSTOOD AND AGREED that the Company will pay to the undersigned any and all damages that may be caused to fences, crops, animals or other property of the undersigned by the Company in exercising any of the rights granted under this easement or in arising from the use by it of any of the property of the undersigned hereinabove described.

IN WITNESS WHEREOF the undersigned have hereunto set *their* hand this *25* day of *March* 1924.

*D. W. Kelly*  
*May Emma Kelly*

STATE OF KENTUCKY

COUNTY OF *Fayette*

I, *B. C. Jones* a Notary Public in and for the State and County aforesaid, do hereby certify that the foregoing instrument in writing was this day produced before me in said County by *D. W. Kelly* and *May Emma Kelly* and acknowledged and delivered by them to be their act and deed.

My commission will expire on the *1st* day of *Jan* 1925

WITNESS my hand this *25th* day of *March* 1924.

*B. C. Jones*

Notary Public, *Fayette* County, Ky



I, FAUST FOUSHEE, Clerk of the County Court of Fayette County, in the State of Kentucky, do

by certify that on this day the foregoing instrument of writing from -----

. R. Kelly and May Emma Kelly -----

Lexington Utilities Company -----

s produced to me in my office, and was ~~acknowledged by~~ ~~XXXXXX~~ ordered to record: Wherefore

the same with certificate thereon endorsed and this my certificate  
has been duly recorded in my office.

-----  
part ----- there to be ----- act and deed

Witness my hand this 7 day of May 1925

Faust Foushee ----- Clerk  
By J. P. Banahan ----- D. C.

TRANSMISSION LINE EASEMENT

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5

In consideration of the sum of \$..... and other good and valuable consideration paid to the undersigned by the Lexington Utilities Company, a corporation, the receipt of which consideration is hereby acknowledged, the undersigned does hereby grant and convey unto said Lexington Utilities Company, successors and assigns, (hereinafter collectively referred to as the Company) for a period of one year and for such time thereafter as any electric transmission lines or any extensions thereof may be maintained by the Company across any part of lands hereinafter described, the right, power and privilege to erect, inspect, maintain, operate, rebuild and repair a transmission line or lines of the Company used in connection with said transmission system; together with the right to haul across any of said lands material to be used in connection with the construction, maintenance and operation of said transmission lines.

The lands belonging to the undersigned over which this easement is granted are situated in the County of ..... State of Kentucky, and are described as follows: 3 1/2 miles South of Lexington on the *Tates Creek Pike.*

being the same property conveyed to the ..... by deed from ..... dated the ..... day of ..... and recorded in Deed Book..... page..... in the office of the Clerk of the County Court of ..... County, Kentucky, to which reference is hereby specifically made for the description therein contained.

Such transmission lines shall be located within fifty (50) feet of the center line of the right-of-way, which center line is described as follows:

Beginning at a point on the property line of Mr. and Mrs. *Wing Hall* and the undersigned, Kentucky Hydro-Electric Station 103447 of a transmission line survey of Dix River-Lexington Line, thence North 65 degrees 42 minutes East 1,303 feet to the center line of the *Tates' Creek Pike*, the property line of *D.W. Kelly* and the undersigned. Kentucky Hydro-Electric Station 1047450.

The undersigned further grant unto the Company, the right, power and privilege to trim or remove any trees, brush or branches now or hereafter growing within fifty (50) feet of the center line above described insofar as it may be reasonably necessary to prevent interference with the wires, towers and appliances constituting and used in connection with said transmission lines.

IT IS EXPRESSLY UNDERSTOOD, however, that the right herein granted to the Company to haul material as hereinabove set out shall be exercised only in the event that the transmission lines are so inaccessible as to make it impracticable to do such hauling over regularly established highways.

"2"

IT IS FURTHER EXPRESSLY UNDERSTOOD AND AGREED that the Company will pay to the undersigned any and all damages that may be caused to fences, crops, animals or other property of the undersigned by the Company in exercising any of the rights granted under this easement or in arising from the use by it of any of the property of the undersigned hereinabove described.

IN WITNESS WHEREOF the undersigned have hereunto set ~~his~~ hand this ...<sup>21<sup>st</sup></sup>...day of <sup>March</sup>....., 1924 .

*Mrs Mattie Gay Swope*  
.....  
*W. M. Swope*  
.....

STATE OF KENTUCKY

COUNTY OF *Fayette*.....

I, *B. L. Jones*.....a Notary Public in and for the State and County aforesaid, do hereby certify that the foregoing instrument in writing was this day produced before me in said County by *Mrs. Mattie Gay Swope*.....and *W. M. Swope*.....and acknowledged and delivered by them to be their act and deed.

My commission will expire on the *1<sup>st</sup>*.....day of *January*.....1925 .

WITNESS my hand this *21<sup>st</sup>*.....day of *March*.....1924 .

*B. L. Jones*.....  
Notary Public, *Fayette*.....County Ky.

I, FAUST FOUSHEE, Clerk of the County Court of Fayette County, in the State of Kentucky, do

hereby certify that on this day the foregoing instrument of writing from -----

Mattie Gay Swope and W. M. Swope

to Lexington Utilities Company

was produced to me in my office, and ~~was taken to the~~ by x ordered to record: Wherefore

~~the same with certificate thereon endorsed and this my certificate  
has been duly recorded in my office.~~

part thereto to be act and deed

Witness my hand this 7 day of May 1925

Faust Foushee Clerk

By J. P. Buchanan D. C.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 52**

**Responding Witness: Lonnie E. Bellar**

Q-52. Please refer to the Brochure titled Q&A, Overhead Electric Line Clearance dated July, 2019. Please see KU's answer to the question "Why is KU clearing the trees away from the overhead electric transmission lines in my area?" What are the reliability standards developed to mitigate the issues [tree branch coming in contact with high-voltage transmission lines that contributed to the 2003 northeast blackout]?

A-52. NERC Reliability Standard FAC-003.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 53**

**Responding Witness: Lonnie E. Bellar**

Q-53. Please refer to the Kentucky Utilities Transmission Line Clearing Plan Map. Please provide an approximate schedule for tree trimming/clearing on the lines indicated in green. What are the KV for each of those lines?

A-53. The work is scheduled for 2021 and 2022. See the response to Question No. 45 for the line kV.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 54**

**Responding Witness: Lonnie E. Bellar**

Q-54. Please refer to the LFUCG Ordinance 35-2013 approving a non-exclusive franchise. Please admit that pursuant to Section 2.2 of said Ordinance, KU is required to comply with LFUCG's Street Tree Ordinances (Chapter 17B). If not, then why not?

A-54. There is no Section 2.2 in LFUCG Ordinance 35-2013. Assuming the question meant to refer to Section 22 of LFUCG Ordinance 35-2013, the Company states that Section 22 speaks for itself and that it says the following in pertinent part:

“Section 22 – The Company shall have the authority to trim trees that are located within or overhang the Rights-of-way so as to prevent the branches of such trees from coming in contact with the wires, cables, or other Facilities of the Company. Any trimming, removal or other disturbance of trees shall conform to all lawful ordinances, requirements and directives of the Government, including but not limited to the Government's Street Tree Ordinance (Chapter 17B of the Code of Ordinances), and the Company shall make available upon reasonable request of Lexington, information regarding its tree trimming practices.”

KU will comply with the lawful provisions of its franchise including, where applicable, LFUCG's Street Tree Ordinances.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 55**

**Responding Witness: Lonnie E. Bellar**

Q-55. Please refer to attachment to KU's Response to LFUCG 1-84(a), page 12, third bullet:

- (a) What is the clearance requirement KU uses between the tree height and the lines to determine whether a tree should be cut or a tree should be trimmed? Please admit that many trees within the Southpoint Drive and Lansdowne Drive cut down or proposed to be cut down are small species and are below this clearance requirement and so have no potential to lead to an outage if trimmed properly. If not, why not?
- (b) With respect to bullet 7, please admit that not all of the trees removed on Southpoint Drive or slated for clear cutting on Lansdowne "have the potential to make contact with the lines." If not, why not?

A-55.

- (a) KU is using technology to help determine what vegetation management work must occur around transmission lines to help maintain safe, reliable service for customers. Using Light Detection and Ranging (LiDAR) technology, KU determines which trees on the easement need to be removed, which trees need to be trimmed, and which trees can remain with no trimming. KU is not clearing all trees within its transmission easements along Southpoint Drive and Lansdowne Drive. KU is removing any tree with a mature height of 15 feet or greater under the line in the "wire zone". KU did not remove all trees along Southpoint Drive and see response to Question No. 1-99 for trees along Lansdowne Drive that KU does not plan to remove.
- (b) KU is typically removing trees that have the potential to impact the safe and reliable operation of the transmission system in the near term or the future. Some of the trees along Southpoint Drive and Lansdowne Drive have previously required vegetation management work to support the safe and reliable operation of the transmission system.



**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 56**

**Responding Witness: Lonnie E. Bellar**

Q-56. Please refer to bullet 9 on page 13 of KU's attachment to LFUCG 1-84a.

- (a) Were letters sent out to property and business owners within the project areas (Southpoint Drive and Lansdowne Drive) and also communicated with area representatives. If not, why not?
- (b) Did certified arborists make personal visits in advance of work on Southpoint and Lansdowne Drives? If not, why not?

A-56.

- (a) Yes, for those property owners and businesses along Southpoint Drive where work was identified. KU also met with the applicable Lexington Councilmember and the Homeowners Association for the Southpoint Drive work. The company plans to send letters and make similar notifications in advance of the Lansdowne Drive work.
- (b) The Communications Plan for the Southpoint Drive project, produced in response to Question No. 47, calls for personal visits to be made by a Company representative, not a certified arborist, prior to beginning work. A Company representative made personal visits/contact in advance of work on Southpoint Drive consistent with that plan. The company also plans to make personal visits/contacts in advance of work on Lansdowne Drive.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 57**

**Responding Witness: John K. Wolfe**

- Q-57. Please see Response to LFUCG 1-87(d). Does KU comply with those standards for vegetation management or not? Does KU comply with the standard related to unacceptable pruning methods?
- A-57. Company arborists adhere to ANSI A300 standards for Utility Pruning of Trees where practicable, but have the flexibility to employ a variety of techniques when the circumstances dictate. KU has articulated this flexible approach in its Distribution Vegetation Management Plan which is on file with the Commission, and which was produced in response to LFUCG 1-83(a):

Right of Way Maintenance Strategy

The Companies employ an Integrated Vegetation Management Program (IVM) that is the process of using chemical, manual, or mechanical techniques to control undesirable vegetation and includes natural or directional pruning, environmentally safe herbicides, and tree removals. The program includes flexibility to operate and maintain variable easement widths, differences between rural and urban service areas, applicable codes or ordinances, and the need to maintain some level of flexibility in addressing landowner requests or concerns.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 58**

**Responding Witness: Lonnie E. Bellar / John K. Wolfe**

Q-58. Please refer to the KU answer to LFUCG 1-95. Are the listed current arborists ISA certified arborists? Does KU have any certified arborists for transmission lines? If so, please state their names.

A-58. Yes, distribution arborists are ISA Certified. For transmission, see the response to LFUCG 1-96.

**KENTUCKY UTILITIES COMPANY**

**Response to Lexington-Fayette Urban County  
Government's Second Request for Information  
Dated February 5, 2021**

**Case No. 2020-00349**

**Question No. 59**

**Responding Witness: Lonnie E. Bellar**

- Q-59. Please refer the KU answer to LFUCG 1- 98(c): Is it thus the position of KU that it does not have to comply with the LFUCG code of Ordinance sections? Please explain your answer.
- A-59. No. As stated in the response to LFUCG 1-98(c), however, the Company removed trees located on Southpoint Drive in accordance with its express easement for safety and reliability reasons. The terms of the private easement specifically grant KU the right to cut trees in the right of way. See attachments to Question 51. Additionally, KU worked with LFUCG representatives to develop a replanting plan which was implemented in December 2020.