COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTONIC APPLICATION OF KENTUCKY UTILITIES	)	
COMPANY FOR AN ADJUSTMENT ELECTRIC	)	CASE NO. 2016-00370
OF ITS RATES AND FOR CERTIFICATES OF	)	
PUBLIC CONVIENCE AND NECESSITY	)	

LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT'S SECOND REQUEST FOR INFORMATION TO KENTUCKY UTILITIES

In accordance with the Public Service Commission's ("Commission") December 13, 2016, Order, Intervenor Lexington-Fayette Urban County Government ("LFUCG") propounds the following data requests upon the Applicant Kentucky Utilities ("KU"). KU shall respond to these requests in accordance with the provisions of the Commission's December 13, 2016 Order, applicable regulations, and the instructions set forth below.

INSTRUCTIONS

1. Please provide written responses, together with any and all exhibits pertaining thereto, separately indexed and tabbed by each response.

2. The responses provided should restate LFUCG's request and also identify the witness(es) responsible for supplying the information.

3. If any request appears confusing, please request clarification directly from counsel for LFUCG.

4. Please answer each designated part of each information request separately. If you do not have complete information with respect to any item, please so state and give as much

information as you do have with respect to the matter inquired about, and identify each person whom you believe may have additional information with respect thereto.

5. To the extent that the specific document, workpaper, or information does not exist as requested, but a similar document, workpaper, or information does exist, provide the similar document, workpaper, or information.

6. To the extent that any request may be answered by way of a computer printout, please identify each variable contained in the printout which would not be self-evident to a person not familiar with the printout.

7. If KU objects to any request on any grounds, please notify counsel for LFUCG as soon as possible.

8. For any document withheld on the basis of privilege, state the following: date; author; addressee; blind copies; all persons to whom distributed, shown, or explained; and, the nature and legal basis for the privilege asserted.

9. In the event any document called for has been destroyed or transferred beyond the control of the company, state the following: the identity of the person by whom it was destroyed or transferred, and the person authorizing the destruction or transfer; the time, place, and method of destruction or transfer; and, the reason(s) for its destruction or transfer. If destroyed or disposed of by operation of a retention policy, state the retention policy.

10. These requests shall be deemed continuing so as to require further and supplemental responses if the company receives or generates additional information within the scope of these requests between the time of the response and the time of any hearing conducted hereon.

11. When used herein, the term “rate code” shall refer to the three-digit arrangement assigned by KU to distinguish between various categories of rates. The term “rate classification” is intended to refer to a broader group, such as Restricted Lighting Service, that may contain multiple rate codes.

Respectfully submitted,

M. Todd Osterloh
____

STURGILL, TURNER, BARKER & MOLONEY, PLLC
James W. Gardner
M. Todd Osterloh
333 W. Vine Street, Suite 1500
Lexington, Kentucky 40507
Telephone No.: (859) 255-8581
Facsimile No.: (859) 231-0851
jgardner@sturgillturner.com
tosterloh@sturgillturner.com

and

Janet Graham, Commissioner of Law
David J. Barberie, Managing Attorney
Andrea C. Brown, Attorney
Department of Law
200 East Main Street
Lexington, Kentucky 40507
(859) 258-3500
jgraham@lexingtonky.gov
dbarberi@lexingtonky.gov
abrown2@lexingtonky.gov

Attorneys for Lexington-Fayette Urban County Government

CERTIFICATE OF SERVICE

In accordance with 807 KAR 5:001, Section 8, I certify that the February 7, 2017, electronic filing of this Request for Information is a true and accurate copy of the same document being filed in paper medium; that the electronic filing will be transmitted to the Commission on February 7, 2017; that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding; and that an original paper medium of the Notice of Filing will be delivered to the Commission within two business days.

____
Counsel for LFUCG

Requests for Information

1. Please refer to Table 2 of William Seelye's testimony. On pages 6-7 of his testimony, Seelye states that "KU is proposing higher percentage increases for rate classes that have low rates of return and lower percentage increases for rate classes that have higher rates of return." Please confirm that the proposed percentage of revenue increase from lighting service and restricted lighting service is higher than (a) residential service, (b) time-of-day secondary service, and (c) all electric schools, all of which have lower rates of return than the lighting service and restricted lighting service classifications. Explain why KU deviated from its desire to have higher percentage increases for rate classes that have low rates of return and lower percentage increases for rate classes that have higher rates of return with respect to lighting classifications.

2. Please refer to KU's response to LFUCG 1-3 and Attachment 2 to LFUCG 1-28. In response to LFUCG 1-3, KU suggests that it has not performed an analysis calculating the percentage increase that would be assigned to LFUCG based on KU's proposed increases to its lighting rate classifications. Attachment 2 to LFUCG demonstrates that KU has performed at least four different analyses calculating the impact on lighting customers, including LFUCG, based on different possible proposals.

    a. Please perform the analysis necessary to verify and confirm LFUCG's assertions identified in LFUCG 1-3.

    b. If KU's calculations for the percentage of total income KU receives for lighting from LFUCG and percentage of proposed increase derived from LFUCG are different than LFUCG's calculations, please provide all data, formulas, and calculations on which KU relies.

    c. Please justify the disproportionate allocation of proposed increase whereby one customer with less than 20% of KU's lights is responsible for more than 50% of KU's proposed revenue increase.

3. Please refer to KU's response to LFUCG 1-22.

    a. Please identify what services EEI provides for the dues KU pays.

    b. Please identify what services EEI provides for payments KU makes for lobbying activities.

    c. Identify the specific issues on which EEI lobbies.

    d. Identify to whom EEI lobbies on each specific issue.

4. For the period of 2013 to present, please provide any internal and external business plans, presentations, marketing material, feasibility studies, lighting conversion financial analyses, customer economic studies, conversion financial models, and correspondence

that was circulated within PPL Corporation and its subsidiaries as it relates to lighting. Your response should include, but not be limited to, internal reviews, communications, assessments, and presentations regarding the roll out or operations of LED lights.

5. Please refer to KU's response to LFUCG 1-28. Please describe to whom the presentations reflected in Attachments 1 and 2 were made.

6. Please refer to KU's response to LFUCG 1-28. Page 5 of Attachment 1 identifies the number of in-active lights in KU's system as of October 31, 2015. Please describe how KU characterizes an "in-active" light.

7. Please refer to KU's response to LFUCG 1-28. On page 13 of Attachment 1, it states that KU has previously and currently conducts audits of lighting for cities within its system.

a. Please explain the purpose of these audits and summarize the results.

b. Please provide a copy of the audit and all underlying data for the audit of KU's lights within LFUCG.

c. Please provide a copy of all audits and underlying data for audits of KU's lights since January 2013.

8. Please refer to KU's response to LFUCG 1-28. Please provide a copy of the report by Northeast Energy Efficiency Partnerships entitled "LED Street Lighting Assessment and Strategies for the Northeast and Mid-Atlantic" that is dated January 2015, which is referenced on page 23 of Attachment 1.

9. Please refer to KU's response to LFUCG 1-28. On page 24 of Attachment 1, there is a line item for Maintenance Savings under Annual Cost/Savings. Please confirm that the negative numbers shown in the row for "Maintenance Savings" reflect KU's understanding that operations and maintenance costs will be reduced for LED lights as compared to other KU light offerings.

10. Please refer to KU's response to LFUCG 1-28. On page 25 of Attachment 1, it states that one benefit of LED lights is "Maintenance Cost Savings." Please confirm that KU agrees that one benefit of LED lights is that LED lights provide reduced operations and maintenance costs as compared to equivalent high pressure sodium lights.

11. Please refer to KU's response to LFUCG 1-28. On page 31 of Attachment 1, it provides a recommendation that KU develop a tool to estimate the cost to switch to LED lighting.

a. State whether KU has developed a tool to estimate the cost to switch to LED lighting.

b. If not, please state whether KU is committed to developing such a tool and when it anticipates that it will accomplish that objective.

12. Please refer to KU's response to LFUCG 1-28. There are several references in Attachment 1 to "Business Partners." Please define "Business Partners."

13. Please refer to KU's response to LFUCG 1-28. Please provide all underlying analysis, data, calculations, and supporting documentation for the information contained in Attachments 1 and 2 that is not otherwise provided to items above.

14. Please refer to KU's response to LFUCG 1-32. Please state whether KU has plans to update its construction standards, as included in Attachment 1, to reflect changes to KU's light offerings.

15. Please refer to KU's response to LFUCG 1-32(b) and KLC 1-50. Please identify how KU calculates the average amount of time a light is repaired. For example, is this based on the time after the light has failed? Is this based on the amount of time after a work order is generated?

16. Please refer to KU's response to LFUCG 1-46. Please provide copies of the communications with the lighting manufacturers referenced and all other communication regarding all possible LED lighting fixtures.

17. Please refer to KU's response to LFUCG 1-49.

a. Please state whether KU considers its proposal for lighting rates to be based on cost of service in this rate case.

b. If KU has never performed a cost-of-service study to determine rates for lighting, please describe KU's methodology in calculating lighting rates when the rates were originally proposed.

18. Please refer to KU's response to LFUCG 1-50(c).

a. KU's response identifies what KU describes as the "majority" of the cost differential between KU and LG&E. What is all of the cost differential?

b. Please explain why KU lights require 10-, 12-, or 15-foot brackets and LG&E lights do not require those brackets.

19. Please refer to KU's response to LFUCG 1-50(o). KU states that, "Operation and maintenance expenses include the cost of replacing the LED fixture and photocells, including associated labor expenses." Does this mean that when an LED fixture fails and is replaced,

neither the purchase nor installation labor of the fixture is capitalized? If they are capitalized, what costs are treated as expenses and allocated as operation and maintenance expenses?

20. Please provide copies of the contract with Davis H. Elliott Company.

21. Please refer to KU's response to LFUCG 1-57.

a. Please provide the four bid submissions referenced in the response.

b. The response specifically mentions work performed in Lexington and Louisville.

i. Please confirm that Wilhod and Reed Utilities do not perform work outside of Lexington or Louisville.

ii. Please state what entity performs services related to lighting outside of Lexington or Louisville.

22. Please explain whether KU attempts to use the lowest-cost approved contractor for lighting services on a particular project.

23. Please refer to KU's response to LFUCG 1-66.

a. Does KU receive revenue (insurance, FEMA, or private reimbursement) for equipment damage caused by vehicle collisions, severe weather, or any other catastrophic event?

b. If so, are the repair expenses and other maintenance costs factored into the survivor curve?

c. Where are these revenues posted?

d. Are corrections to cost posted based on revenue received or reimbursed?

24. Please refer to KU's response to LFUCG 1-68.

a. Please state whether KU has ever recorded plant costs by lighting type or rate code.

b. Does KU record plant costs differently for LS and RLS classifications, as compared to other classifications?

25. Please refer to KU's response to LFUCG 1-71.

a. Provide a list of any and all municipalities in which PPL Corporation or its subsidiaries has converted street lights to LED technology.

b. Provide any internal reviews, communications, assessments, and presentations regarding the roll out or operations of these LED lights.

26. Please refer to KU's response to LFUCG 1-72(c).

a. Confirm that the service life for this property group is 26 years as stated in the response.

b. Please reconcile why the service life for this property group is 26 years, but William Seelye calculates the Carrying Charge based on a rate of 4.00% or 25 years, as shown in response to LFUCG 1-50.

27. Please refer to KU's response to LFUCG 1-73.

a. Confirm that the service life for the LS offerings is 26 years as stated in the response.

b. Please reconcile why the service life for this property group is 26 years, but William Seelye calculates the Carrying Charge based on a rate of 4.00% or 25 years, as shown in response to LFUCG 1-50.

28. Please refer to KU's response to LFUCG 1-73.

a. On what does KU base its statement that the average service life of an LED fixture is 13 years?

b. Please provide all documentation that supports KU's position stated in subparagraph (a).

29. Please refer to KU's response to LFUCG 1-75. State whether PPL Corporation or its subsidiaries have partnered with any municipalities or entities other than LFUCG to acquire experience in new technologies, including LED lights. If so, please identify the municipalities and the nature of the project.

30. Please refer to KU's response to LFUCG 1-75.

a. Please provide a detailed breakdown of the actual $45,910.80 costs, separated by project.

b. Provide copies of all invoices and other documentation to support the expenses identified in subparagraph (a) above.

c. Please explain whether and how KU has accounted for the project cost of $45,910.80 for the purposes of ratemaking.

31. State whether there are any LED lights serving customers in KU's system that are currently billed under an LS or RLS rate code or billed based on a special contract. If so, please identify what the rate code or terms of the contract are.

32. Please refer to KU's response to LFUCG 1-79. Please provide a rate comparison based on the lighting accounts held by LFUCG.

33. Please refer to KU's response to LFUCG 1-80. Each of the LED-equivalent lights listed by KU is a high pressure sodium offering. The Energy Policy Act of 2005 – Section 135 H.R. 6-39 states that "Mercury vapor lamp ballasts . . . shall not be manufactured or imported

after January 1, 2008." It appears as though LED technology would be a logical replacement for RLS light offerings. Please confirm that no LED technologies were considered for replacement of mercury vapor light offerings and explain why.

34. Please refer to KU's response to LFUCG 1-81. Please provide greater detail on how KU determined the varieties of LED lights to include in its proposed tariff, and particularly the wattage/lumens options. In your response, specify the metrics used to "develop alternative LED options that will provide the same effective lighting as HID options" and the range of LED options considered. Specify the time period during which this work was done. Provide any documents, spreadsheets, or presentation materials received by KU or prepared by or on behalf of KU in reaching those decisions.

35. Please refer to KU's response to LFUCG 1-107.

a. Please confirm that KU agrees that transmission and distribution costs are generally shared by more than one customer.

b. Please confirm that KU agrees that customers have independent demand profiles.

36. Please refer to KU's response to LFUCG 1-101.

a. The item requested that KU provide each contract for current and future unmetered service. Please provide these contracts or state that none exist.

b. If no contracts for unmetered service exist, please provide a detailed description of each customer that has unmetered service, including each customer's facilities, and the amount of estimated energy usage.

37. Please provide a detailed description on how KU has increased its projected revenue for cable attachments based on the KentuckyWired project for which KU entered into a license agreement with the Commonwealth of Kentucky Finance and Administration cabinet. Include within your response the actual and projected connections and revenue associated with this project during the base period, test year, and any future periods that have been forecasted by KU.

38. Please identify every rate code and special contract for which KU collects revenue that is subject to LFUCG's franchise fee.

39. Please refer to KU's response to KLC 1-55(a). Please explain what the "# of poles" is inclusive of. Please include in your response whether the "# of poles" includes every KU pole with electrical transmission or distribution lines, as well as every KU pole with lighting.

40. Please explain how KU marks its poles within Fayette County to identify them as being owned and maintained by KU.

41. Is a cost-of-service study using the Base/Intermediate/Peak methodology described in the NARUC Electric Utility Cost Allocation Manual?

42. Please refer to KU's response to PSC 2-89.

a. Please explain why KU is willing to replace failed mercury vapor bulbs but will remove the entire fixture if the fixture is broken.

b. Please identify the replacement fixtures KU uses for each mercury vapor fixture.

c. Please state whether KU will begin to replace broken mercury vapor fixtures with LED technology.

43. Please confirm that KU agrees that stranded asset losses would be reduced or eliminated if KU stopped installing non-LED lighting technology and began to only install LED at lower or same costs but with reduced or lower O & M. Please also state whether KU will consider this approach.

44. In tab "KU Rate Summary" of the spreadsheet "Att_DU_PSC_1-54_KULights.xlsx", cells F30:F96 in a table by rate code are labelled as Total Lights. Cells AF30:AF96 are similarly labelled as Total Lights but contain different values. Please explain the origins and differences of these two sets of values for Total Lights.

45. In tab "KU Rate Summary" of the spreadsheet "Att_DU_PSC_1-54_KULights.xlsx", cells C21:CC21 contain annual operations and maintenance cost allocations for by rate code. Some entries in these cells are formulae referencing other cells in this spreadsheet but some entries contain specific numerical values or formulae that contain specific numerical values. For each of these cells C21:CC21, identify the origin and basis for any numerical values included in the contents of the cell.

46. In tab "KU Rate Summary" of the spreadsheet "Att_DU_PSC_1-54_KULights.xlsx", cells BU4 and BU14 contain notes identifying certain spreadsheets as sources for adjacent information. Provide copies of the referenced spreadsheets in electronic format with all formulas intact.

47. In tab "LED Rates" of the spreadsheet "Att_DU_PSC_1-54_KULights.xlsx", cells BU4, CH16 and CH18 contain notes identifying certain spreadsheets as sources for adjacent information. Provide copies of the referenced spreadsheets in electronic format with all formulas intact.

48. In the spreadsheet "Att_DU_PSC_1-54_KULights.xlsx", light wattage is used extensively in various calculations. Specify for each lighting rate code whether these are nominal lamp wattage or fixture input wattage and provide both values.

49. In tab "LED Rates" of the spreadsheet "Att_DU_PSC_1-54_KULights.xlsx", each LED light proposed for inclusion in the tariff is compared with a non-LED light listed below the LED light. Explain how the non-LED lights were chosen for this comparison.

50. Explain how KU will decide or assist a customer to decide what LED light to use if a customer wishes to replace an existing non-LED street light with an LED light.

51. Explain how KU will in the future decide or assist a customer to decide what light to use if a customer wishes to have KU install a new light where one has not been installed.

52. Identify the brand and model KU proposes to use for each LED light rate code and provide product literature or specifications including at least nominal lamp wattage, fixture input wattage, CRI, color temperature, L70 life, initial warranty duration, and costs that would be covered by a warranty claim. Provide similar data for each non-LED street light luminaire currently provided by KU.

53. What are the specifications of the photocell receptacles and photocells KU will use when installing street light luminaires in the immediate future? Specify in your response how many pins will be included.

54. KU currently plans to deploy "smart grid" technologies that will require wireless communications. Will that deployment enable wireless communications with street lights if street lights are appropriately equipped? If so, please describe the time frame in which this will occur within KU's system?

55. For each lighting technology offered by KU, including HPS, metal halide, MV, and LED and any variants of each for which there is a material difference, identify each of the operations and maintenance activities that KU anticipates performing on such street lights, whether the activity is performed on a scheduled (periodic) basis or as-needed, the anticipated frequency of the activity with respect to an individual light, the cost elements associated with that activity, and whether or in what circumstances each such cost element is covered by warranty.

56. Provide any documents, spreadsheets, or presentation materials received by KU or prepared by or on behalf of KU since January 1, 2014, that provide estimates of the annual operations and maintenance costs for any lighting offering by KU, including HPS, metal halide, MV, and LED and any variants of each for which there is a material difference.

57. Provide any documents, spreadsheets, or presentation materials received by KU or prepared by or on behalf of KU since January 1, 2014, that provide data about or forecasts of the expected life, failure rates, or similar statistics concerning light fixture technologies for light offerings by KU.

58. Explain KU's basis for establishing the expected life of each lighting technology, including HPS, metal halide, MV, and LED and any variants of each for which there is a material difference in expected life. Include within your response all documentation to support your response. If KU does not have any documents to support its response and relies only on oral communication, please identify who made statements on behalf of what companies, to whom at KU those statements were made, when the statements were made, and a detailed description of the substance of those communications.

59. Some lights that are being placed in restricted lighting service will be replaced earlier than normal because replacement parts are not available for those lights. Explain how KU has reflected this fact in its projected street lighting costs and in allocating costs to various street light types to establish the Company's tariff proposal in this case.

60. Tab "Installed Cost" of the spreadsheet "Att_DU_PSC_1-54_KULights.xlsx", contains a table of the installed costs projected by KU for each street light technology for which KU proposes a rate in this case, except for LED lights. Each entry of this table reflects a detailed analysis provided in a tab for that lighting type. Provide similar detailed analyses of installed cost for the LED lights proposed for tariff in this case.

61. When a street light fixture for a non-LED light fails and is replaced, are the purchase or installation labor expenses of the fixture capitalized? If they are capitalized, what costs are treated as expenses and allocated as operation and maintenance expenses?

62. When a street light lamp for a non-LED light fails and is replaced, are the purchase or installation labor expenses of the lamp capitalized? If they are capitalized, what costs are treated as expenses and allocated as operation and maintenance expenses?